

THE RURAL COMMUNITY AND ITS SCHOOLS

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RURAL COMMUNITY AND ITS SCHOOLS

W. E. B.

MADE IN U. S. A.

TO

MY FATHER AND MOTHER
WHO GAVE ME A LOVE FOR
MY FARM HOME AND FOR
ITS NATURE ENVIRON-
MENT

EDITOR'S INTRODUCTION

The solution of the problems of rural education is of surpassing interest to all of us in America. Our ideal commits us to the proposal that there shall be equality of opportunity for children and for adults. In our earlier history when our society was primarily agrarian, the great differences which now exist between rural and urban America were unknown. If we acknowledge this mutual responsibility and interdependence then all of us must concern ourselves with the program of education provided for that half of our population who live in villages and in the open country.

We are all dependent for life upon the production of the farm. The standards of living which we all enjoy will be determined in no small degree by the demand for goods and services which come from this part of the population. It is only as relatively high standards of living and of tastes are developed in the whole population that we may hope to secure that balance between consumption and production which will mean a maximum of good for all of us. Furthermore, our social life and our government are dependent upon the quality of persons who are recruited from the rural areas to maintain our city population. It is a well-known fact that in the large cities of the United States the birth rate is not sufficient to maintain even a stable population. Young people who live on farms and in villages migrate to the city. These young persons will, in the years that lie ahead, staff our industries and occupy places of importance in business and in our professional life. Indeed we may be sure that the quality of leadership throughout the nation will be deter-

mined in no small degree by the type of opportunity provided for children who live in the country.

This book deals primarily with the problems of rural education. Possibly the most fundamental of all of these problems has to do with the financing of rural schools. For the most part in the United States, the rural areas have less ability, whether measured by wealth or income available for the support of education, than have our urban and industrial communities. The sparsity of population in rural areas adds to the cost of providing school opportunities comparable to those that are provided in the more densely populated regions. The only satisfactory solution that we have found to this problem is in the development of a program of support on a state-wide basis. If rural school children are to enjoy as good opportunities for education as those now provided in urban schools it will be necessary in every state to organize a system of state support based upon the principle that the children, wherever they are, shall have guaranteed to them a reasonably adequate program of education without overburdening the communities in which they live. This means, when carried out in a program of state support, that revenue collected on a state-wide basis must be distributed to local administrative areas in terms of the need for support as represented by the cost of the maintenance of an adequate program of education and with respect to the ability of each local area to maintain its schools.

But the financing of schools so as to equalize the burden of taxes and to guarantee at least a minimum of support will not solve the problem. In most of our states there is need for a reorganization of local units of administration. It is not possible in a small school district or school township to provide the services of administration, supervision, health, recreation, library services, and the like without undue cost. Where the local unit of administration is increased in size, the same administrative and supervisory officers, the same personnel engaged in the work

of health and attendance can be spread over the larger areas at a minimum cost. Whether we view the situation from the standpoint of local support or from that of equalization of support by the state, we are forced to conclude that the success of the program in rural America waits upon the reorganization and enlargement of rural school areas.

With the development of a higher quality of professional leadership in rural areas will come an improvement in the educational opportunities provided. The transportation of the children and the organization of larger school units will make possible the development of curricula adapted not only to local needs but also developed in line with our current social and economic life. No other part of our school system so certainly needs the services of highly competent professional workers thoroughly conversant with the needs and aspirations of the population which the schools are organized to serve. The solution of the rural school problem waits upon the professional service of a generation of men and women who see in rural life an opportunity through education for the development of social life as rich and as significant as that enjoyed by city people.

This book provides information concerning the current situation in rural America. It deals in a thoughtful and stimulating manner with the problems that must be solved and gives suggestions for their solution. It presents ideals and procedures for those who are to engage in this most important part of the educational enterprise. It will be helpful to all who are preparing to work in villages and rural schools and informing to those who wish well for the development of all of our people.

GEORGE D. STRAYER

PREFACE

At no time in the history of our country has there been so great a need as there is today in rural schools for leaders who have a clear and comprehensive understanding of the major problems which they must face and ultimately solve. These problems have increased rapidly in number and difficulty during the past fifty years. The mechanizing of agriculture, the separation of the farmer from the consumers of his products, the increase of farm indebtedness and tenantry, the development of world trade, the speculative buying and selling of farm crops, and the difference in living standards of the farmers and those maintained by corresponding cultural groups in cities, have been important factors in making what is termed the "rural problem" one of the most vexing questions confronting our leaders at this time. The American ideal of a fluid population, free to leave less desirable occupations and communities and to seek better opportunities in other fields, resulted in a rapid migration from country to city during the years 1880 to 1930. The mere loss of numbers from rural sections would not have been objectionable had the migration not been qualitative in nature. There is good evidence that during these decades the higher levels of intelligence were being drawn from rural communities, leaving them with a lowered average intelligence, and seriously depleted of initiative and leadership.

The author of this book was a farm boy in a poor agricultural region. He taught in one-teacher rural schools during the closing years of the century, and has been a teacher of rural teachers and a student of rural problems since 1901. During this time one idea has been impressed upon him: *The key to the solution of the*

rural situation is held by the teachers of rural elementary and secondary schools. A satisfactory solution seems to be impossible in many instances because of a closed ring of difficulties. These are: Rural schools usually have poorer teachers and poorer teaching than do city schools. This condition is due largely to insufficient salaries, poor buildings, and inadequate equipment. Insufficient salaries and inadequate teaching equipment in turn are the result of a lack of interest and trained leadership on the part of rural citizens. The lack of community interest and leadership is, finally, due to poor teachers and poor teaching. Thus the ring is closed and there seems to be but one point at which it can be opened: Teachers must be sent into rural schools whose teaching ability is far above the level of the salaries they receive in order that later on they, or others, may obtain the salaries and teaching conditions which they need and deserve.

This book has been written with the idea expressed in the closing sentence above as a working basis. It is addressed especially to the upper 20 to 40 per cent of the teachers of rural America who are able to catch a vision of their responsibility and the possibility of the higher service that is within their reach. They are the ones who must contribute the leaven that will "leaven the whole lump." It attempts to interpret the forces that have brought into existence the rural situation as it is today; to discuss the best forms of organization, administration, and financial support that can be provided for rural schools; to suggest the kind of curriculum that should be planned for rural children of elementary and secondary school levels; to describe the training and the personal, social, and spiritual qualities desirable in a rural teacher; and to present the community obligations that should be shouldered by the rural teaching force. It further endeavors to show that, ultimately, more liberal financial aid must be provided from state and federal sources for the support of rural schools; and that such aid will fall short of the

results it should bring if there is not a genuine spiritual awakening of rural people themselves, such as can come only from teachers who are themselves spiritually awake.

There has never been a time more favorable for securing a high type of teachers for rural communities than the present. The surplus of teachers in every field, and the general employment situation, make possible the selection of those especially fit for rural positions, while the efforts of the Federal Government to bring economic relief to farmers of the nation have caused all sections and classes to think of the rural situation as one of major importance to the country as a whole. If to those factors are added a higher type of teaching service in rural schools and a more intelligent and aggressive leadership on the part of rural teachers, a new day should dawn for the farming population and an enrichment come to the life of the entire nation.

Whatever value this volume may possess is due in a large measure to the thousands of rural teachers with whom the author has been associated during the past quarter of a century in classrooms and teacher institutes. While from these contacts has come a certain measure of discouragement, there have come insight, understanding, assurance of better conditions to come, and an inspiration leading to a more determined effort to give rural children a fair chance. Very valuable help has come from leaders in the fields of rural sociology, economics, and education, as well as from farmers and their families with whom intimate personal contacts have been made. Much credit is due also to my wife, Lorena Hafer Lewis, for the assistance she rendered in reading, correcting, and suggesting structural changes in the manuscript; and to Dr. Louise Frey for her very helpful criticism from the point of view of one skilled in technical English.

CHARLES D. LEWIS

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CHAPTER I

THE BACKGROUND OF THE RURAL PROBLEM

CHARACTERISTICS OF THE OLD RURAL COMMUNITY

Rural life has always moved slowly in comparison with urban life. Industrially, socially, politically, educationally, and religiously it has been characterized by a spirit of conservatism. Its scattered population and attachment to the soil seem to have kept it relatively stable in spite of influences that would have produced rapid changes in the life of the more closely concentrated population of cities. This inertia is accountable for many of the peculiarities of rural communities, and in some measure for the difficulties which they face today. It is not wholly a disadvantage, however, as it has served as a social balance wheel, preventing the destruction of established institutions by too rapid motion. Rural stability is being affected by modern means of communication and transportation and by improved educational facilities, but it continues to be an important influence in American life and no forces are discernible which seem likely to eliminate it.

In attempting to obtain a satisfactory understanding of that great social complex referred to as the "rural problem," it will be profitable to review briefly the characteristics of rural life as it has been, essentially, for ages and the major forces that have operated to bring about the radical changes that the past few decades have witnessed.

It is possible to find isolated rural communities which still

possess many of the characteristic features of the old rural life, but it is necessary to go back to the early decades of the last century to find this type of life dominant in the farming sections of the United States. The most marked of these characteristics was the self-dependence of the rural home and the rural community. Long after cities and towns had grown largely dependent upon "brought-on" commodities, the farm folk of our country were practically independent of the outside world. A very large proportion of the foods consumed by any farm family was produced on the home lands or obtained from the community. In many cases little besides salt, sugar, and condiments was included in the list of articles purchased from the grocer. A large part of the clothing, too, was a home product. The hand cards, the spinning wheel, and the big wooden loom were in every well-ordered home, and by means of them mother and daughters produced a variety of "homespun." For a generation after the making of cloth in the home had practically ceased, garments of every type were made for the entire family. Candle-making was carried on almost as long as was the making of clothing, and string beans, green corn, pumpkins, and every kind of fruit were dried in quantities that supplied the thrifty family from season to season.

The typical rural community of the recent past was about as self-sustaining as was the home. The local grist mills converted the grain from the farm into flour or meal, taking their pay in "toll" from each grist as it was ground. Sawmills, often adjuncts to the grist mills, cut the farmer's logs into lumber for house building and other forms of construction on the farm. This sawing was usually paid for by allowing the mill operator to take a share of the lumber which he, in turn, sold to those of the community who did not own land or were short of good timber. Wagons and buggies were made by a local expert from local wood, with only tires and other metal parts bought from outside

markets. Plows, rakes, grain cradles, hoes, and such other simple implements as were used about the farm were made by operators of small factories, or by the local blacksmith, but in either case payment was often made by direct exchange of commodities rather than by money. A "tanyard" was usually within reach of every community. Hides from animals butchered by the farmer for home consumption were taken to the local tannery and tanned into leather to make the family shoes. These shoes were sometimes made by the father and sometimes, in the more prosperous homes, by an itinerant cobbler who came to the home for a few days or weeks, depending upon the size of the family, and made a year's supply of shoes and boots for the various members. The better farmers usually had a surplus of grains, meats, and vegetables for sale to the less thrifty and this was exchanged for farm labor at prices fixed by local custom rather than from market reports. Thus, the outside world had little to do with the economic life of the old rural community. Facilities for communication and transportation were very poor but this was a matter of little importance in a community which met almost every need from its own resources. Until population began to push out upon the treeless prairies, absolute isolation of almost any rural area as large as an average county would have caused relatively little inconvenience. Life in it would have continued pretty much in the ordinary way without contact with distant regions and strange peoples.

THE MECHANIZING OF AGRICULTURE

The implements used in agricultural production changed very little during the forty centuries preceding the American Revolution, and from that time until near the middle of the last century, changes were gradual. The sickle that was used for harvesting small grains by the great-grandfathers of our youth was little

different from the ones used by the men after whom Ruth gleaned in the fields of Boaz; and the implements used for breaking and cultivating the soil changed little more during the same time. By the middle of the last century, however, the spirit of invention that had brought on the Industrial Revolution began to affect agriculture. Mowing and reaping machines were put upon the market; plows were greatly improved by the discovery of the chilling process; seeders and drills put an end to the measured step of the sower who scattered the seed by hand; and the progenitor of the modern thresher took the place of the antiquated flail. Not only were these major implements developed for performing the more essential types of farm labor, but a multitude of others, more refined in adaptation to various needs, were designed for performing wholly new tasks on the farm.

This process of mechanizing agricultural production was accompanied by many and important changes in the industrial and economic organization of our nation. Machines were necessary for making machines, and the local factory that supplied only the limited needs of a small area could not afford them. B. F. Avery saw the limitations of his little plow shop in Virginia in 1836 and, with a vision of the expanding West, moved to Louisville, Kentucky, where the shop that had met the needs of the farmers of a few counties became a factory that was to give implements to the farmers of a dozen states. This movement was typical of a general trend. Within less than half a century many agricultural implement factories were established in Ohio, Indiana, Illinois, and Wisconsin to meet the needs of the expanding farm area of the Mississippi Valley. Canton, Springfield, Louisville, South Bend, Moline, Racine, and many other cities grew up which were to become known to the Middle-West farmer as the homes of the machines that came to his farm. Into these centers came hundreds of thousands

of men with their families to aid in constructing these new engines of production. Many were foreigners, unfamiliar with farm life. Many, from the factory towns of the East, had lost touch with the soil and did not even think in terms of the home garden as an aid to the family income. As a result, these workers had to be fed from distant fields upon products handled by many persons, each of whom demanded payment for his services. The outcome of this factory development, accompanied as it was by the extension of railways into every section, was the extinction of the local shop that had been meeting a local demand by hand labor and direct exchange. Better wagons and plows could be brought from South Bend or Louisville than could be made in the village shop, and at lower cost. Slowly but inevitably the fires in the small forges died out, and the anvils ceased to ring.

THE PASSING OF THE BARTER MARKET

A change resulted from the machine age of agriculture that was to modify very profoundly the entire economic condition of the farmer. He was no longer able to negotiate directly with manufacturers of the articles which he needed in an effort to secure for each an equitable price. The factory workers, office employees, and administrative force demanded by the new type of production were far removed from him, separated by long stretches of railway and a new army of transportation operatives and officials. Middlemen also came in between the two types of producers to demand a toll, and often a very large one, for the service rendered. Grain elevators appeared in the grain-producing sections, and very complexly organized and operated grain markets and exchanges developed in Chicago and other centers. Great stockyards sprang up to handle livestock of every kind on its journey from producer to ultimate consumer. The difference between the price which the farm producer received

and that which the urban consumer paid was greatly increased, not merely by legitimate costs, but more by speculative buying and selling on the part of those who rendered little real service to the producer or the consumer. In this process of carrying on long-distance exchange the farmer lost all control over the price of the commodities which he placed upon the market, and as a result he lost much of his economic freedom. The complexity of this entire transformation was greatly increased by the development of foreign markets for American agricultural products. The Industrial Revolution had developed a great industrial population in Europe that was serving a world need, created by changed methods of production and transportation and by the opening of new markets in the Orient. England and Western Europe seemed to have an unlimited need for our grain, meats, and raw materials, and with the development of more remote markets the difficulty of controlling prices increased. The formerly independent American farmer became still further dependent because of speculative activities and price manipulations of world-wide extent. The result was an increased bewilderment and a decreased power to help himself.

MONEY CHANGES FROM A LUXURY TO A NECESSITY ON THE FARM

So long as the manufacturing artisan—who not only satisfied the farmer's simple needs for manufactured articles, but also consumed his products—and the producing farmer were members of the same or adjacent communities, the amount of money demanded in the process of exchange was small. When these two became widely separated a cash income became necessary in order that each might maintain satisfactory living conditions. Not only was money required to pay for the constantly increasing number of machines and implements which new methods of farming demanded, but home and personal needs also became greater. As means of transportation and communication were

improved, farm folk became more fully aware of the things city dwellers possessed and which they lacked. Weekly and daily newspapers brought a knowledge of living conditions and styles of dress to the country communities, with the result that an improved type of home and personal equipment was demanded. The cost of better breeds of livestock and of improved varieties of seeds for field and garden had to be incurred if the farmer was to be successful in producing for the competitive market. Finally, automobiles and tractors made their appearance; electrical equipment for home and farm became first a possibility, then almost a necessity; talking machines and radios became a requirement for the up-to-date rural home; and so the cost of living on the farm increased. These urges for improving the farm as a producing agency and the farm home as a living place would not have been so disastrous had the farmer and his family been willing to delay purchase of those things not essential to production until they could be paid for. But they were not. Mail-order houses began to sell on the installment plan; high pressure salesmen reached every community; and borrowing became easier as wealth accumulated in the hands of the investing few. Added to the demands for increased expenditures listed above, there were urgent calls for public expenditures which seemed not only desirable but necessary. Schools which would give farm children an opportunity equal to that provided for urban children must be provided, and improved roads must be built as a means of reducing the cost of marketing farm produce and of permitting the full enjoyment of the family car. Bonds were issued for each of these public improvements, and the tax load to meet payments of principal and interest was added to the load of personal debt which the farmers carried.

Conditions were so serious that "farm relief" had become a major political problem in the United States even before the

financial crash of 1929. The National Farm Board poured nearly half a billion dollars into the farm commodities market during 1930 and 1931 in an effort to provide a fair price for farm products and restore the buying power of the farmer. The special session of Congress, called by President Roosevelt immediately after his inauguration in March, 1933, initiated schemes for the stabilization of farm crops by means of controlled production and formulated plans to relieve the financial distress of farmers by refinancing farm debts. The earlier experiment seems to have been a complete failure. Sufficient time has not yet elapsed to warrant an attempt to pass upon the wisdom and effectiveness of the later ones as devices for improving general agricultural conditions. There is a widespread feeling, however, on the part of those who are studying the economic, industrial, and social problems of the American farmer, that a permanent solution of the farm problem must involve an effective organization of farmers themselves for the purpose of maintaining such a balance between production and demand as will insure a price level that will give a fair profit on production cost. A general economic and industrial readjustment is necessary in order that an optimum buying and consuming power may be maintained by the masses of the non-agricultural population, and such a buying and consuming power must be provided before there can be a permanent and satisfactory solution of the problem of farm production. Until such time as a solution of the general economic and industrial situation can be reached, it will be necessary for farmers to adapt themselves to conditions as they are. As an emergency measure, it may be wise to increase the income of the American farmer by paying him from the Federal Treasury for crops and livestock which he refrains from raising, or for carrying out a nationally planned program of soil conservation and building. That this subsidizing process should continue as a permanent policy, however, is unthinkable; another solution

must be discovered. It would seem that only by developing an effective organization, and by the power and willingness to do clear and constructive thinking, can the farmers find a way out of their present difficulties. Much has been done for them. More, probably, will be done. The major portion of the task they must do themselves.

SUMMARY

Rural life throughout the ages has been relatively static. Social customs and methods of production have changed slowly because the farm home and rural community have been almost wholly self-sufficient. What a farmer did not produce he did without unless he could satisfy his needs by direct exchange with his neighbors. Food, shelter, clothing, and personal service were products of the farm and the family group. This condition prevailed for ages and was broken up only a little more than a century ago by the introduction of machinery and the scientific control of production. As the farmer became dependent upon machines he also became dependent upon those who made the machines and on others who carried on the process of exchange. Money became necessary in order to bridge the gap between producers and consumers. As the things that were demanded for home improvement and economic crop production increased, debts were contracted to supplement the diminishing cash returns from the soil. In this way the once independent farmer lost his economic liberty and the farm problems have come to occupy a central position in the political, economic, and social life of our nation. Many experiments have been tried in an effort to solve these problems, but as yet little seems to have been achieved.

CHAPTER II

FACTORS THAT HAVE BROUGHT ABOUT A RURAL PROBLEM

The underlying causes that have brought about the serious problems which disturb rural America today must be sought in the fields of natural science. Chemistry, physics, and biology have created a new world for the farmer as truly as they have for those who are engaged in manufacturing, mining, and the distribution of commodities. Human intelligence has invaded and partially conquered the three realms of nature mentioned, with the result that the old order of life is passing away and a new order is being brought into existence. Though collective humanity is only well started in this new era, social institutions of long standing have been so thrown out of balance and adjustment as to seriously threaten their very existence.

During the closing years of the eighteenth century, thinking men in Europe and America began to develop a new type of agriculture that would in some degree correspond to the new industrial life that had resulted from the Industrial Revolution. But the opening of vast areas of agricultural lands west of the Appalachians at the beginning of the last century seriously checked the progress of the movement. By the middle of the last century, however, the exhaustion of farm lands in the East resulted in federal action of great importance. In 1862, while the country was in the midst of the War between the States, Senator Morrill, of New Hampshire, introduced a bill into

Congress which was destined to have more far-reaching effects upon the future of the country than were anticipated at that time. This bill became the Morrell Act which provided for the establishment of a state agricultural college in each state of the union. These institutions were organized during the next two decades, but it was soon discovered that there was no reliable body of scientific information for them to impart to those who would study agriculture. To meet this difficulty, the Hatch Act was passed in 1885 providing federal aid in establishing state experiment stations associated with the land grant colleges. As a result of the splendid work done by these latter institutions, the agricultural colleges found themselves in possession of a fairly satisfactory body of subject matter in their special field by the time the present century opened. Two other acts of Congress greatly aided in this work. One of these, the Smith-Lever Act of 1914, gave federal aid to the work of county farm agents and home demonstration agents. The other, the Smith-Hughes Act of 1917, gave similar aid to the teaching of agriculture and home economics in the high schools of the nation.

SCIENTIFIC AGRICULTURE PRODUCTION AND PROFITS

The new science of agriculture, which the agencies mentioned above did so much to create and disseminate, soon began to effect farm life in the United States profoundly. The more important influences were these:

Soil Maintenance and Restoration.—During the years prior to the middle of the last century little thought had been given by American farmers to the problem of maintaining the fertility of the soil or of rebuilding soils that had been exhausted by continuous cropping. Since land was abundant and cheap, when a field became too poor to yield satisfactory returns it was thrown out as waste land and more ground was cleared. This process resulted in the abandonment of a vast acreage as unprofitable

for cultivation and in the creation of greater areas of submarginal land which, though still cultivated, produced far below the original capacity. By the early nineties, scientific knowledge, as disseminated by means of bulletins, agricultural journals, and farmers' institutes, began to have a marked effect in reversing the trend toward soil-exhaustion. Between 1900 and 1925 there was a marked increase in the yield per acre in practically all crops raised throughout the nation,¹ which had the effect of materially increasing the crops produced per man employed. Closely related to this factor of soil maintenance were the improved quality and lowered cost of fertilizers, the great increase in the number and efficiency of the leguminous crops used for soil enrichment, and the amount of cottonseed meal used as feed for cattle.

Crop Improvement.—A further outgrowth of the movement inaugurated by the establishment of the land grant colleges and the experiment stations was the scientific breeding of the plants raised on the American farms. Not only were better and more productive varieties of all farm crops developed by scientific experimenters, but the quality and quantity of many of the crops were increased by means of seed selection and seed testing on the part of the farmers themselves. It has been estimated that the interest in seed corn selection and testing, as aroused by the work of Miss Field, County Superintendent of Page County, Iowa, the "Corn Lady of Iowa," increased the average yield of corn five bushels per acre in that state within a period of ten years. Such an increase meant the addition of 50,000,000 bushels to the corn crop of Iowa alone without any increase in acreage. Many entirely new plants, too, such as the cowpea, the soybean, and

¹ The average yield of corn for the five years, 1896-1900, was 26.2 bushels per acre; that of wheat, 12.9 bushels per acre. The average yield for the five years, 1921-25, was corn, 27.8 bushels per acre; wheat, 13.8 bushels per acre. *U. S. Census Report, Agricultural Abstracts*, Washington: U. S. Printing Office, 1932, p. 682.

kaffir were brought in from other countries to meet the specific needs of the American farm. These factors of plant improvement and importation further increased the production per acre of land cultivated.

Animal Breeding and Increased Production.—A third means employed for increasing the producing capacity of American acres has been the improvement of all forms of livestock. The animals which man took from the wild state and made into his companions and helpers changed very slowly until methods of scientific breeding became known. Then changes were brought about with great rapidity. The farmyard hen, as an example, retained many of the characteristics of her wild state until very recently. She persisted in laying only a few dozen eggs and then obeyed her instinctive tendency to sit. Man's struggle to overcome this natural urge resulted in a long fight with heredity. Today a well-bred, egg-type hen lays from 250 to 300 eggs in a year. Similarly, the cow of a couple of generations ago was largely the same as her remote ancestor, who provided an ample supply of milk for her offspring until it was able to care for itself, then drove it from her and "went dry" until nature's need brought on a flow of milk once more. The modern dairy cow has become a milk-and-butter-fat machine. With the smallest possible distribution of food to the building and maintenance of her body she concentrates upon the production of milk and butter fat. In a similar manner, the entire field of animal husbandry has been affected. Science has greatly increased the quantity and quality of the specific product which an animal will produce, thereby multiplying the power of a given degree of soil fertility to produce those commodities which have value to man.

The Control of Farm Diseases and Other Enemies.—Science has made a fourth contribution to the productive power of the farm by the control which it has developed over plant and animal diseases and other injuries resulting from the depreda-

tions of living creatures. In spite of the battles that have been fought against this depredating army by means of scientific devices, the farm losses from these sources probably amount to a billion dollars per year. Had it not been for this fight, carried on over a vast area, the losses to the farmers of our nation would have been almost ruinous. In the early days of machine farming, army worms, grasshoppers, Hessian flies, and potato beetles were prominent insect enemies of the farmer; while rusts, smuts, blights, and wilts were his plant enemies. Later have appeared the gypsy moth, the brown-tailed moth, the corn borer, the cotton boll weevil, the Japanese beetle, the fruit fly, and other insect enemies. Diseases of every kind which attack plants and animals have been imported from the far corners of the earth. Every dollar's worth of farm crops saved by the aid of science has been that much added to the producing power of the farm, with little increase in the labor investment demanded.

Machinery and Power on the Farm.—Farm machinery, and the application of the power of the internal combustion engine to drive it, constitute the fifth factor that has operated to increase agricultural production per unit of land and of labor. Mention was made in the introductory chapter of the mechanization of agriculture, but its effect upon production was not stressed. The commodity output from farms has probably been increased in as large a measure by machines and the application of power to their operation as has been done by all of the other factors combined. Not only has the quantity of work per farm laborer been greatly increased, but the quality of their work has also been improved. Breaking and pulverizing, seeding and cultivating, harvesting and marketing have all been speeded up with consequent decrease in unit cost and increase in volume of production.

With a non-farm buying power, domestic and foreign, sufficient to consume the products of our farms, these contributions

of science and invention to the producing power of the land would have been a great boon to the farmers. But science and invention had affected industrial production even more than it had changed the productive power of the farm. Power and machines multiplied the producing ability of labor tremendously and in consequence technological unemployment increased alarmingly. Profits accumulated rapidly in the hands of those who owned the machines and power, or controlled systems of sale and distribution. Wealth became concentrated in the hands of individuals and of banks and other corporate organizations, especially during the World War and for a decade after its close. This accumulated wealth found no outlet in the development of our West as had been the case previously. It was loaned to foreign countries to the amount of many billions of dollars, and other billions were expended in capital outlay to increase the producing power of the nation far beyond actual need. Many major lines of production were so over-developed that it became impossible for plants to operate for more than a small portion of each year. This was especially true in the case of automobiles, tires, shoes, and textiles. As unemployment increased the buying power of the masses decreased. The farmer found a shrinking market for his foods and raw materials, though millions were underfed and poorly clad. His cash income shrank along with his markets and he was soon barely able to meet the demands of taxes, interest, and payments upon debts. This withdrawal of the farmer from the buying public in turn caused the closing of more factories and mines and the falling off in transportation. Only one result could follow. The depression came. It might not have come with such a spectacular rush as it did in 1929 had it not been for wild investments in the securities market, but its coming was inevitable. Machines and power were doing the productive work of the world and neither had to be fed, clothed, or housed. A single illustration of the effect

of applying machines and power to production will make this point clear. A Milwaukee automobile frame factory has recently installed the latest type of automatic machinery in a new plant. This equipment has a capacity of ten thousand finished frames per day and is operated by fewer than two hundred men. The semi-automatic plant which it superseded had the same capacity but employed two thousand men. The president of the company stated that with methods and machinery employed a few years earlier, twenty thousand men were necessary to turn out the same number of frames. The automatic machines and power had replaced 19,800 potential consumers without reduction in output.²

Similar conditions prevail in almost every type of non-agricultural industry in the country, making an adequate buying power on the part of labor possible only during boom conditions when factories, farms, mines, and transporting agencies are working at maximum capacity to meet what is sure to be a short-lived scarcity. As soon as a surplus accumulates from this peak production industries stop, buying power falls off, and the depression phase of the cycle sets in.

URBAN IMPROVEMENT AND RURAL DISCONTENT

In the early days of our country cities not only had few advantages as compared with those of rural communities, but they also had a number of disadvantages. Health conditions were not so good as those in the country, the water supply was usually less adequate and sanitary, lighting facilities were no better, and food supplies were less satisfactory. In fact there were few ways in which town or city homes could boast of advantages superior to those possessed by the better homes of the farm. During the last quarter of the nineteenth century, however, the situation

² Chase, Stuart—"The Economy of Abundance," *Journal of the National Education Association*, April, 1935, p. 107.

began to change in the cities. Health conditions were improved by the construction of sewerage systems and the providing of an ample and pure water supply. Milk and food inspection was inaugurated; streets were improved; gas and electric lights were introduced; cable cars and electric trolleys gradually replaced the cab and horse car; congested slum districts were bettered and the worst type of tenement houses began to disappear. Welfare work of various types was organized. Schools were improved rapidly and hospital service began to approach the conditions of modern efficiency.

The development of the factory system, the great increase in the number of people who were employed in trade and transportation, and the mechanizing of agriculture, with the consequent decrease in demand for farm labor, brought about a rapid movement from the farms to the cities. Reports of the many new luxuries and conveniences of the city were carried into the rural community by those who had left the farm and also by the city papers that went generally into almost every neighborhood. American life has always been characterized by a large degree of mobility and this mobility was increased by the rapid industrial development centered in the cities. The admonition of Horace Greeley, "Go West, young man, go West," that sounded throughout the land during the decade preceding the Civil War, was changed during the seventies and eighties to, "Go to the city, young man." During those two decades the number of cities with a population of more than fifty thousand increased 130 per cent. The three cities, New York, Philadelphia, and Chicago, added a total of 1,746,000 to their population, an increase amounting to more than 80 per cent, with the result that each passed the million mark. Much of this increase in population was the result of foreign immigration, but the movement from country to city was also large. The lure of the city increased with the passing years until the economic and industrial

situation of the beginning thirties actually forced a considerable population back to the land, not because the farms offered a good opportunity, but because it was the only means by which great numbers could secure the bare necessities of life.

During the two generations which were marked by the rapid rise of the American city, the attractive nature of city life was gradually increased by the multiplicity of things that were being invented and made available for the homes and for the personal gratification of individuals. The simple life of earlier days was rapidly disappearing. With it was going much of the attractiveness of rural environment, due to the clearing of the forests, the decrease of game and fish, and the consequent lessening of the more thrilling nature contacts of the average individual living on the farm. The rural schools, too, were contributing an important part to the urbanizing influence. The textbooks and general reading matter that came to the rural community were largely of a type to arouse non-rural interests, thus increasing the pull of the city upon the people of the slower moving rural society. These urban advantages tended to draw people to the cities from the upper levels of rural population, with a resulting detriment to the rural community.

SELECTIVE MIGRATION FROM THE FARM

Movements of population usually have a marked qualitative influence upon the regions from which and into which they shift. When crowded out of a desirable location into an undesirable one, migration of the less intelligent people tends to improve the level of intelligence of the community from which they are driven. When the more intelligent are drawn to a better region because of the advantages which it possesses, such a movement tends to lower the average of intelligence of the region from which it is drawn. This is shown in rural regions where broad and fertile valleys are surrounded by rough country. The

more capable element of the surplus population tends to get possession of the better land, or if this is impossible, to move into other good agricultural territory or into non-agricultural occupations. On the other hand, the less capable and the less intelligent tend to be crowded into the marginal land where life conditions are inevitably hard and inhospitable to the development of the better life of the neighborhood or the individual. As an extreme example the so-called "branch-water folk" of certain mountain regions may be cited. In these regions a good native stock, found in the more fertile valleys, has furnished a very low type of population for the headwater reaches of the streams, the steep hillsides, and the ridge-crests. Such movements have developed a slum population in these places as certainly as along a river front or other undesirable living section of a city.

Selective migration has unquestionably tended to affect the type of population of older regions that have furnished immigrants to new and attractive regions. This is especially true where dangers, risks, and hardships have been associated with the occupancy of new and desirable territory. There is probably no better evidence of intelligence on the part of an individual than his willingness to make a sacrifice and take a risk for the chance of bettering his own condition. The results of such selective movements are seen in the characteristics that are manifested by the rural population of the United States from the older East to the newer West. These differences would seem to be explained in a large measure upon the theory that the westward movement of population has tended to leave the lower levels of intelligence behind in rural sections. This partly accounts for the conservatism, deficiency in leadership, and the inability to achieve effective social integration through co-operation on the part of the rural element of the East. Studies of rural intelligence bear out this assumption. During the examination of drafted men for service in the World War, the intelligence tests

were given to 36,500 individuals who also reported the occupational groups to which they belonged.³ There were seventy-four such groups. The farmers stood seventh from the bottom, sixty-seventh from the top, with a median intelligence rating of fifth from the top on a seven-point scale. Haggerty and Nash,⁴ in the study of intelligence made in connection with the New York State Survey, grouped the children tested into six groups according to the occupation of their fathers as follows: professional; business and clerical; skilled labor; semi-skilled labor; unskilled labor; farmers. Of these, the children of farmers ranked lowest in intelligence. Pintner,⁵ a few years before the study of Haggerty and Nash was made, also carried on a study in the schools of New York and found that rural children were decidedly inferior to city children in average intelligence, as indicated by the results of intelligence tests. Hinds,⁶ in a study of the intelligence of city, village, and country children in Indiana, obtained results indicating a very marked inferiority of country children. Book,⁷ in his study of the intelligence of high school seniors in Indiana, 1922, found the rural student group to contain the largest proportion of highest intelligence; but also found a considerably larger group showing the lowest degree of intelligence revealed by the study. Sorokin and his associates,⁸ in their discussion of rural intelligence, grant that the results of intelligence tests, upon their face, provide "a firm foundation for

³ Bulletin, National School Service, February 15, 1919.

⁴ Haggerty, M. E., and Nash, Harry B.—"Mental Capacity of Children and Parental Occupations," *Journal of Educational Psychology*, 15: 559, December, 1924.

⁵ Pintner, Rudolf—*The Mental Survey*. New York: D. Appleton and Company, 1918, pp. 40-50.

⁶ Hinds, James H.—"Comparison of Brightness of Country and City Children," *Journal of Educational Research*, 5: 120-24, February, 1922.

⁷ Book, William F.—*The Intelligence of High School Seniors*. New York: The Macmillan Company, 1922, p. 235.

⁸ Sorokin, P. A., Zimmerman, C. C., and Galpin, C. J.—*A Systematic Source Book in Rural Sociology*. University of Minnesota Press, 1932, Vol. III, p. 229.

the theory of a country bled white by the migration of the brighter to the cities." They incline, however, to the belief that the poor showing made by rural children and adults in intelligence tests is due to the nature of the tests and not to a real inferiority of rural people. After devoting a number of pages to a summary of the chief data derived from the more important intelligence tests applied to rural and urban populations for comparative purposes, they say, "Through the entire rather involved chapter we have attempted to follow the thread of this inquiry: 'Are the mental differences found between urban and rural groups a function of an innate intellectual difference or of the tools of measurement?' Our results seem to point to the second explanation as being possible and indeed probable."⁹

The writer believes that the conclusion as to the "tools of measurement" being the explanation for the low scores of rural people is unsound. This conclusion is based in part upon the evidence presented by the authors quoted, but more largely from the results of his own investigation. This investigation,¹⁰ a study of the intelligence of high school students in good agricultural communities of Tennessee, Kentucky, and Virginia, showed the median for the entire group to be 7.5 points below the standard median for high school students. The results also showed the students living on farms lower in median intelligence than students of the same schools living in rural villages. Those expressing a desire to be farmers, or in the case of girls, to live on farms when settled in life, were the lowest of nine groups, based upon occupational choices expressed. The study of Sandiford,¹¹

⁹ *Ibid.*, p. 286.

¹⁰ Lewis, Charles D.—*Rural Intelligence in Relation to Rural Population*. George Peabody College for Teachers, Nashville, Tenn., Chap. IV, 1929. An explanation of the method employed in this study, and other facts bearing upon the problem of rural intelligence and the effect of selective migration upon it, will be found in Appendix A.

¹¹ Sandiford, Peter—"Paternal Occupations and Intelligence of Offspring," *School and Society*, 23: 118, January 23, 1926.

dealing with the intelligence of children of various occupational groups in British Columbia, is one of a very few that shows farm children having a rank well up in the list. In his study farm children ranked fourth from the top among six groups. The lowest group, including children of unskilled laborers, had a median I.Q., however, of slightly above one hundred. This investigation would seem to substantiate the statement made above that the westward movement of population has tended to be selective of the higher intelligence levels.

Selective migration from the country becomes very important when we recall that there is always a larger proportion of children in rural than in urban districts,¹² and that with the ever decreasing amount of labor required to supply the agricultural demands of the world, there must continue to be an overflow of rural population into industrial centers and cities. Only one result can follow a long continuance of such selective migration. The quality of the stream of life that flows from country to city will deteriorate because of the lowering of the quality found in the rural population reservoir. If this tendency is not stopped the result must finally be a lowering of the quality of life throughout the nation, urban as well as rural.

SUMMARY

Physical and biological sciences have made a new agriculture during the past century. The land grant colleges, state experiment stations, county farm agents, and vocational high school teachers have been the four most important forces engaged in creating and disseminating the new knowledge that has been responsible for this "agricultural revolution." Methods employed in maintenance and restoration of soil fertility, the improvement of farm crops and animals, the control of plant and animal enemies and diseases, and the application of power and ma-

¹² See Table II, p. 54, of this volume.

chinery to farm operations, are the chief agencies which have brought about the profound changes in agriculture as an occupation and as a manner of life. The most important social and economic results of these improvements were the great increase in the power of the farm to produce foodstuffs and raw materials, and the very considerable reduction in the man power necessary to bring about this production. These changes were similar in effect to those which had brought about a revolution in methods of manufacturing, mining, and transportation a few decades earlier. Both have been greatly increased in effectiveness since the opening of the World War.

The improvement in urban living conditions, the increase in the demand for labor and service of every kind in cities, and the decreased need for farm labor, caused a continuous movement of population from rural to urban sections between 1870 and 1930. This migration from rural communities was selective in its nature, with the result that the average level of rural intelligence seems to have been lowered even in good farming sections. Since the rural community has always supplied a surplus of population to the cities, a continuance of the process of lowering the level of rural intelligence will ultimately lower the intelligence level of the entire nation.

CHAPTER III

THE ADVANTAGES AND DISADVANTAGES OF THE RURAL COMMUNITY

Every teacher engaged in rural school work should have a clear-cut, sound conception of the advantages and disadvantages of farming as an occupation and of the rural community as a place of residence. It would mean much to both teachers and pupils if only those were employed to teach in rural schools who honestly, and upon mature judgment, believe that these advantages definitely outweigh the disadvantages. So long as conditions remain as they now are many teachers will begin their work in rural schools with the definite intention of working into city service as soon as possible. Better results will be obtained when a genuine love for the essential features of rural life and occupations constitutes an important factor in leading those who teach rural children to enter and remain in that field of service.

GENERAL SOCIAL AND ECONOMIC FACTORS

One of the most important factors that enters into making a given locality desirable as a place of residence is the type of human associations which it provides. This does not mean merely the number of human beings with which the individual is permitted to mingle, but rather the number of personal friendships established and their value in developing the more desirable characteristics of character and personality. The most stifling

loneliness often comes in a city where multitudes are within touch of the hand but where no one comes into a close and sympathetic relationship with one's life. 'Hundreds of fellow beings may live within sound and sight of a city dweller without his knowing their names, their occupations, their failures and successes, or their ideals and aspirations. There may be neither friendship nor enmity, but mere indifference. In a rural community the situation is otherwise. There, a person lives in a *neighborhood* and everyone residing within a considerable area is known in a more or less personal way. Some are pleasant, some are unpleasant; some are good, some are bad; but whatever they may be they are there, owning or renting an adjacent or near-by farm and not to be disregarded. If a neighbor is sick he is visited; if he is hungry he is fed; if he is in distress he is comforted. He is a personality and custom demands that he be treated as such. The city may have highly organized and effective charities and welfare associations which care for the needy and unfortunate in a most commendable manner, but such care is often frigidly impersonal. The material values which result may be quite gratifying, but the spiritual values which accrue to both receiver and giver often seem to be extremely meager. There is selfishness, sordid and cruel, in the country, of course, but the general tendency of the rural type of life is toward personal relationships, personal interests, and a sense of personal responsibility for neighbors. City life, on the other hand, tends toward the establishment of impersonal relations among people. Mass production, mass transportation, mass recreation, mass amusements, mass worship, all tend to lessen the feeling of personal responsibility. At their worst human relationships may be as bad in rural communities as they can be in cities, but at their best they seem to possess factors that are active in the production of personal character and social ideals that are not a natural product of urban life.

There are many and serious disadvantages to be found in the rural community but they would seem to be largely incidental rather than necessary. Chief among these are: inadequate incomes from rural occupations; poor means of communication; poor schools, churches, and other forms of social organizations; a quite general absence of certain modern conveniences such as electricity, water supply, and sewage disposal systems; insufficient professional service such as medical care and hospitalization; personal annoyances such as result from the too great activity of that rural-minded personage, "Mrs. Grundy"; and other disadvantages of minor importance. Of this list some are being improved rapidly by the activity of various agencies, local, state, and federal. Some will give way before the advance of modern progress, which is coming to rural communities as surely as it is coming to urban centers, though more slowly. There is good reason to believe that these disadvantages can be removed from the rural community, leaving the essential advantages of rural life, as they are presented in the pages that follow, free to act upon rural children to the fullest possible degree in developing a fine type of citizenship.

HOME AND OCCUPATIONAL FACTORS

During the school year of 1916-17 the author¹ made a study of the comparative performances of pupils from one-teacher rural schools and from rural village and town schools when working together in the high school. In connection with other matters included in the questionnaire used, the teachers of the high schools concerned were asked to rank the two types of students on four character bases, namely: (1) obedience to school authority; (2) application to study; (3) purpose in life; (4) honesty

¹ "The Performance of Pupils from One-Teacher Schools and Many-Teacher Schools Working Together in the High School," *Kentucky High School Quarterly*, October, 1917.

and truthfulness. Forty-six principals and teachers from the twenty-one Kentucky high schools included in the original study participated in the ranking of the students. The pupils from the one-teacher, open-country schools were ranked higher than the village and town students in 64.25 per cent of the cases; equal in 25 per cent of the cases, and lower in 11.75 per cent of the cases. Not satisfied with the results obtained from the Kentucky schools, the study was extended to include a group of twelve high schools in Minnesota. Here, again, the rankings were decidedly in favor of the students from the one-teacher schools. It was difficult to account for this high ranking of children from the open country as compared with those from rural towns and villages in these four character elements except upon the assumption that there were factors involved in farm life that were accountable for the difference. The following analysis of farm life situations is made in an effort to locate the character-forming influences that may be present in the farm home and in farming as an occupation, and may account for the markedly higher rating given farm children in points of character as compared with their village associates.

Early Loyalties and Character Building.—The farm family is more of a social unit than is the city family. The nearest neighbor usually lives from a quarter to a half-mile distant and the home land extends about the homestead far enough to keep the early life of the children very largely confined to its borders. There is constant association of the children with the mother and with each other when they are small, and the boys, as they grow older, are almost as intimately associated with the father. Visiting with children of other families is usually by parental permission and by no means so frequent and promiscuous as in towns and cities. Home discipline is, as a rule, firmer, with a less frequent tendency on the part of the children to resist or evade it because of knowledge which they possess of disciplinary

methods practiced in other homes. As a result, children tend to grow up with early loyalties to parents, to brothers and sisters, and to home ideals. When the children start to school, brothers and sisters frequently go together to the same teacher and room, or at least to the same building, from the first grade through the eighth and often through high school. Older brothers and sisters learn to guide and protect younger ones and the feeling of family unity is maintained. In the city, on the other hand, and to a large degree in towns and villages, this family unity is impossible. Play groups are formed across family lines rather than within them; children become acquainted with all types of family management, mismanagement, and indifference; and the early loyalties and ideals that are so naturally formed within the family group on the farm are never formed. Of course there are bad homes in the country and good ones in the city, but an analysis of environmental influences leads to the belief that the farm home tends to develop certain important character traits that the city home environment does not so effectively develop.

If the child goes to school without the loyalties and ideals of conduct that should have been developed in the home it is difficult to develop them within the school. A high type of citizenship, with conduct based upon strongly developed loyalties and ideals, therefore, seems to come very largely from home training. There appears to be good reason, also, for the belief that the home best fitted to develop this essential product is a good one in the open country.

Child Occupation and Character Building.—Just as socially desirable loyalties and ideals are a natural product of the farm home, so are responsibility and a sense of duty outcomes resulting from the type of labor which is available for children about the farmstead and upon the farm itself. Child-labor is without question an evil to the individual and to society when done for hire away from the home with profit as the end in view. When

work is done by the child as a contributing member of the family group it has great possibilities in the way of character development. A very small child can and will enjoy performing little tasks fully within his strength for the benefit of mother or father. Chickens are to be fed, wood carried for the kitchen fire, fruit brought from the orchard. Each is a simple duty but it may demand the stopping of play for a few minutes and is accompanied by a sense of service rendered. As the child grows older, the wise parent will gradually place certain responsibilities upon him and see to it that they are met faithfully and willingly. In all of this the child is a co-worker with parents and with brothers and sisters for a common good. There is probably no greater element in human life for the development of the finest character than this sense of individual responsibility to other members of a social group for a definite contribution to the good of all. It is the factor that will make for the good of the school when the child becomes a part of the school, and for the good of society when the period of formal education has passed. The citizen with a clear sense of his individual responsibility for the common good is needed to make democratic government safe and efficient. Just as simple loyalties and ideals are developed by rural home and family relationships, so are the broader elements in character and personality developed by these early responsibilities that are assumed by the child in the performance of simple tasks about the home and upon the farm. Here again, there is opportunity for abuses which society must be watchful to prevent. Some parents are unworthy of the trust they hold and will work children for the sake of the work done just as truly as does the factory operator who hires children for the profit they will create. Enlightened parenthood is the best safeguard against this type of exploitation, however, and may be trusted to prevent it in a vast majority of cases. On the other hand, it is almost impossible to provide the moral equivalent of this participative responsibility

in the city home. Home life in an apartment house, or in houses crowded close together on lots barely large enough to accommodate them, is about as effective a barrier to this educative home-employment of children as is the modern factory system of production a barrier to the development of a worth-while by-product of character.

Farm Production and Character Building.—Before the coming of the machine age, occupations were a great educative force. Then, production was a very complex process on the part of the individual worker and it demanded the development of many skills and much thought power. Today, however, the complexity is confined almost wholly to the planning of the machine and the system of production and distribution, while the acts of the individual operator are very simple and demand practically no thought. This is less true in farming, even in its highly mechanized form, than in other industries. The farmer must still plan, initiate, adapt, adjust, and think through the entire productive process. This is one of the important factors in the development of character and personality on the farm today. The farmer may be lacking in "schooling" and yet possess quite a high degree of education. Each one of the major activities of the farmer—soil conservation and building, plant husbandry, animal husbandry, use and care of farm machinery, farm marketing—demands much thought and continual learning. Each is within itself a much more complex process than any that a person below the managerial and supervisory levels in industry is called upon to perform, and for that reason more developmental in its effects upon the individual.

There is another element in farming as an occupation that is an important influence in the development of character. It is that of deferred rewards for which the farmer is continually working. The development of the individual, as well as of society, is dependent upon the capacity of man to control the

present by means of past experiences projected into future situations. This element of forethought lies at the heart of all improvement in living conditions and in life. That situation is the most developmental which demands the most consideration for the future. Equatorial man is in a low stage of development because there has been no ebb and flow of life resulting from seasonal changes and demanding preparation for the period of scarcity during a period of plenty. Each day is sufficient unto itself, with the result that each day is lived for and in itself. No one will go to the ant and "consider her ways and be wise," unless he is forced to do so by a changing environment. The artisan of today expects his pay envelope at the end of the week; the office employee counts upon a check at the end of two weeks or a month; and few persons depending upon a salary of any amount expect to pass the end of a month without receiving a monetary reward for their services. It is not so, however, with the farmer. He prepares the soil for corn in the early spring, plants the seed in April or May, cultivates the growing crop during the heat of July and August, harvests the crop in October, feeds the grain to hogs during November and December, and markets the fat animals after Christmas. A year elapses between the time he starts the crop and the time he receives his financial reward. If it is a calf or a colt that he is raising, his reward will come two or three years after the beginning of his labors; and if, instead of any of the above ventures in production, he plants an apple orchard, it will be five or six years before he gets worth-while returns on his investment of labor and faith. It is impossible to determine with definiteness the importance of this element of deferred rewards on the character and life of the farmer. But at this time, when it seems the people of our nation are in serious danger of losing the rich inheritance of faith and idealism that was theirs in the past, these spiritual values arising from the essential characteristics of farm-

ing as an occupation should not be overlooked. The element of deferred rewards which has such an important relation to the development of children reared upon a small, home-operated farm, will have an insignificant effect upon those living upon the great industrialized farms, such as are being developed in America and which are characteristic of the development of communistic farming in Russia. There is little doubt but that almost any commodity can be produced at a lower unit cost by the large-unit farm method; but what, in that case, will become of many of the intangible products of the small-unit farm? Possibly these unmeasurable results are of far greater importance than those which can be expressed in bushels, pounds, and dollars.

Effort and Reward in Relation to Character Building.—The greatest personal disadvantage in great wealth or abject poverty probably arises from the loss of a sense of relationship between effort and reward on the part of the one affected. In the one case necessities, conveniences, and luxuries come without effort on the part of the one receiving them. In the other, rewards seem never to come no matter what effort is expended. The ideal situation is that in which there is a definitely recognized relation between the two. The consciousness of this existing relation between effort and reward is much less on the part of the city child than on the part of the country child. The city child usually knows very little of the labor, or business, or professional activities by means of which his father supplies the family needs. The father frequently leaves the home early and returns late. His children probably have only a vague conception as to his occupation, at least while they are young, and of its relationship to the good things they enjoy in life. Milk is set at the doorstep or sent up on the elevator before they awake. Mother orders over the telephone and foods are brought from grocery or market. Bills are paid, spending money received,

and clothes purchased without the children having an understanding of what the daily absence of father has to do with it all.

It is a very different story with the farm child. He knows of the long hours of his father in the field. He understands the effect of drought or rainfall upon the good things of life that will come to him. Work and intelligent handling of soil, crops, and animals are directly related in his thinking to food, a trip, a new suit, books, schooling, or an automobile. In this way there is developed at an early age that most important consciousness of the relation existing between work, responsibility, persistence, intelligence, and the good and desirable things of life.

The Nature Environment and Character Building.—The final influence which is active in developing worthy character traits in the children of the open country is that of the nature environment. The tempo of life has been tremendously accelerated in the cities of today, to the evident detriment of human character. The ceaseless round of activities—business, social, and recreational—leaves little time for self-acquaintance and attention to the more fundamental factors that enter into the making of the best that is to be found in human character and personality. The intoxication of continuous going is one of the harmful features in our modern way of living; it is far more serious in cities than in the country; more of a menace to the best things of life in the rural village and town than on the farm. It is true that the automobile and improved roads have increased this danger to the rural population, but not to the harmful extent that has come to the cities. All children love the out-of-doors with its many and varied nature contacts. Many country children grow up with little aid in understanding and appreciating these factors in their environment, but their influence is not wholly lost. A quiet starlit night, almost "audibly silent"; the restfulness of the shade of a great tree during the long noon

rest of the summer day; these things and many others of which they are types, surely have a steadying, a deepening influence upon the life of the individual who is subjected to them. There is great need for parents and teachers who can direct the children of the country in an understanding of and an appreciation for nature; but even under existing conditions rural children have a great advantage over children of the cities because of the richness of their contact with a "God-made world," rather than with one dominantly expressive of human constructiveness.

CONCLUSIONS

The evidences that have been presented in this chapter have gone to show that there is a moral value resulting from the rural social relationships and from the essential conditions that inhere in the farm home and farm occupations which accounts for the high rating of open-country children on character points, and for the oft-expressed opinion that the rural communities provide a moral and spiritual, as well as a political, balance wheel for society. If these evidences are sufficiently conclusive to carry conviction, it is obviously to the highest interest of society that its rural sections be given every advantage that can be provided for supplementing those intrinsic factors in rural life that tend toward the making of character. Because of the fact that rural population is constantly overflowing into non-rural regions, two conclusions seem to be fully warranted. These are: (1) The level of native intelligence in the rural sections must not be lowered by selective migration from it. (2) An environment which tends to produce a citizenship of unusually high average character must be supplemented by the very best type of educational service in order that the net results of formal and informal education may be the best possible product to society.

SUMMARY

If the ideal were ever attained in rural education, every teacher working in rural schools would be there because she liked rural life and work better than any other. There are many advantages to rural life which grow out of its essential characteristics and cannot be transferred to urban situations. The disadvantages which are associated with it, such as insufficient income, lack of modern living conveniences and refinements, and poor social advantages, are all removable, not necessary.

There are features of the rural home and farm occupations that seem calculated by their very nature to develop sound and dependable character traits. The family constitutes a close social unit that tends to develop early loyalties and ideals of conduct. Farm occupations tend to develop a sense of responsibility, the ability to await for a deferred reward, and an understanding of the close relation between effort and the advantages that result from it. The nature environment, which is a constant and necessary accompaniment of farm life and occupations, possesses features that develop character in a manner which the man-made environment of the city does not and seemingly cannot possess.

Just as many of the disadvantages of the rural community are incidental rather than essential, so many of its advantages are potential rather than existing. The task of the rural school is to aid in eliminating the former and to make the latter effective to the highest possible degree.

CHAPTER IV

THE DEVELOPMENT OF EDUCATION IN THE UNITED STATES

EARLY INFLUENCES

In order that the student of rural education may have a full understanding of the problems involved in the work of improving conditions which exist at the present time, it is desirable that he have a clear conception as to how the general situation has developed. With this objective in mind a brief review of the development of public education in the United States will be presented.

The early settlers in America were driven from their European homes by religious, intellectual, political, and economic oppression. The intellectual Renaissance of the fifteenth century stirred Western Europe with a new life that the customs, traditions, and superstitions of the Dark Ages could not control. Liberated minds became active in thinking; adventurous spirits traversed unknown seas and strange lands in order to extend man's knowledge of the world in which he lived; the divine rights of temporal and spiritual rulers were questioned, and their powers defied. The religious Reformation followed the Renaissance, and the conception of political and economic liberty came as a natural result of the freeing of men's souls from the bondage of ecclesiastical tyranny. The printing press put the experiences, thoughts, and aspirations of human beings on the pages of books and pamphlets, and Protestantism and democracy demanded that

the common man be given the ability to read what was printed. Men became restless under political autocracy and resentful of the almost universal poverty that had resulted from wars and the burden of a non-producing aristocracy. When explorers brought reports of a vast and free land beyond the Atlantic, thousands were willing to risk any peril and hardship in the hope of finding freedom and economic sufficiency.

Shortly after the opening of the seventeenth century, two streams of population started to move across the Atlantic from England and Northern Europe. Those who formed these streams were not adventurers or explorers but home seekers. The first entered the Chesapeake Bay and settled on the level and fertile land of the coastal plain. The second sailed for the same point but nature intervened and it established itself on the rocky coast almost ten degrees to the north. The same general influences controlled these two lines of human movement but geographical, climatic, and personal factors caused them to develop in the New World in a markedly different manner. The purpose of this review warrants the consideration of but one line of difference in this development, that of the system of education which each brought into existence.

THE DEVELOPMENT OF THE NEW ENGLAND TYPE OF EDUCATION

While not more than a third of those who came to America in the *Mayflower* were "Pilgrims," launching upon a noble adventure for religious liberty, this third set the standards for the little colony and dominated its ideals. Men like Brewster, Bradford, Standish, Endicott, and Winthrop were strong enough to give tone to the whole region, and much that has been New England for three centuries resulted from their dynamic personalities. It was nature and the native red man in America, however, that gave the characteristics to the social, political, industrial, and economic development of this region which are

still affecting the educational situation there and in the newer regions to the west.

Six factors caused New England to develop as it did. They were: (1) hostile Indians, who made it necessary that the settlers live in villages for protection; (2) a climate that made outdoor work almost impossible for a number of months during each year, and demanded either idleness or indoor occupation; (3) rivers that tumbled over glacial moraines on their journey to the sea, and by so doing made water power available to do the work of men; (4) an irregular coastline that afforded many good harbors for the small ships, which at that time carried the commerce of the world; (5) fur-bearing animals in the forests which provided the raw material for the manufacture of hats and furs for European markets; and (6) fish in great abundance in the ocean, constituting an inexhaustible source of food and of wealth. A seventh factor that became profoundly important later on was the fact that climatic and soil conditions were such as to make African slavery unprofitable in New England. The enforced idleness of the Negroes during the long winters would have made them a heavy liability instead of an economic asset.

The town and village life, which conditions made necessary, molded to a great extent the form which life was to take in the entire northern section of our country. The close proximity of homes made co-operation in social, political, and industrial matters easy and necessary. The "town meeting" was a convenient way of spending the long twilight of the northern summer evening and a means of breaking the dreary monotony of the shut-in life in winter. The Bibles, and other books brought from England by the small number of educated members of the colony, were read and re-read by those who may have had little natural interest in matters religious or intellectual. Children were taught to read, write, and cipher when snow and

cold prevented work or play and during nights that were too long to be spent in sleep. Manufacturing and mechanical ingenuity were forced upon those who had no other means of production during the long months of winter. Long sermons, theological discussions, and puritanic austerity were probably in no small measure by-products of New England weather.

Schools were a natural result of village life under conditions described and it is not strange that the records of Massachusetts show laws requiring them as early as 1647, only twenty-seven years after the landing of the little company that came across the ocean on the *Mayflower*. Towns of fifty householders were required to maintain schools for the teaching of reading and writing, and those with a hundred families had to provide a Latin Grammar School. These were not public schools so far as their manner of support was concerned, for funds to maintain them came from the assessment upon householders who patronized them. It was not until more than two centuries had passed that the general principle of taxing all wealth for the education of all children was accepted, even in the states that had derived their educational interests and ideals from the New England stream.

As population moved westward from the coastal region, the early system of local government and education was taken along. Settlements were made at points which were suited by nature for centers of government and trade. The territory conveniently adjacent to these centers was organized into units for local government and for school support and control. Localities sufficiently remote from the central town were formed into school districts which were either administered by the larger unit of which they were a part, or were given their own board of control. The term "town," as applied to the entire local unit in New England, was changed to "township" further west, and the county, composed of a number of townships, became more

important from a political and administrative point of view.

The New England system suited quite well as it spread over New York and into Ohio, but a difficulty soon developed. With the opening of the Northwest Territory the surveyor began to precede the settler and lay off the entire region in townships six miles square. These mathematically determined units were used for purposes of school organization but they ceased to have any relation to community and trade centers. The spirit of New England moved west, but the machinery of school administration which it had developed proved to be a handicap which has retarded school development in the rural communities of twenty states. In these states, although wealth and public opinion favor the development of education, the one-teacher school continues to be the standard school unit for the great majority of farm communities.

THE DEVELOPMENT OF THE SOUTHERN TYPE OF EDUCATION

The population stream that entered by the Chesapeake did not differ very materially from that which came to New England. There were a few more younger sons of country gentlemen, a few more soldiers, many more indentured servants, and not so many scholarly men of the dissenter type. Adams says of them:

The 5649 immigrants who may be called the first Virginians, were of all types—a few gentlemen with servants, a few genuine criminals, some soldiers and professional men, more or less riff-raff and much excellent material in the way of artisans, mechanics, and so on. When stability and private ownership came . . . the types of newcomers most in evidence were men with capital to build plantations and those known as indentured servants. The latter, who were of considerable importance in our history, were of all grades. . . . Many of good standing at home took advantage of this way of making a new beginning, and the word servant, which covered schoolmasters, younger sons of good families, and others, is misleading. It meant

merely in many cases those who sold themselves into service in exchange for the costly voyage to America which they could not otherwise pay for.¹

The social, political, and economic life of the South was affected in no small degree by the interest of King James and such influential patrons as Sir Robert Cecil and Lord De la Warr, and by the personal leadership of Sir Thomas Gates, Sir Thomas Dale, and others. More important, however, was the influence of environment. Level land easily reached by tide-water streams; a mild climate that permitted labor, sports, and recreation out of doors for almost the entire year; and the ease with which tobacco—the new luxury of Europe—was produced, all tended toward making this region the ideal home of a landed aristocracy. Relatively free from Indian attacks, the land-seekers rapidly spread over the coastal region and back to the foot of the Blue Ridge Mountains. Farms grew into plantations, and as Negro slavery increased, wealth came to the larger land-owners.

There was interest in education among the settlers of the South, but the thinness of population made the establishment of schools difficult. As a result, elementary training was given by private tutors in the homes of the more prosperous, and neglected by those unable to provide for that form of instruction. For higher education the sons of the wealthy were sent to the colleges of England or New England or, after 1693, to William and Mary, Virginia's own institution of higher learning. As time passed and slave labor increased the prosperity of the South, private schools of the elementary level and academies for preparing youth for college, were quite generally established. These private institutions made public schools unnecessary for the education of the children of the planter class, and the spirit

¹ Adams, James Truslow—*The March of Democracy*, Vol. I. New York: Charles Scribner's Sons, 1932, pp. 12-13.

of democracy was not strong enough to demand it for those of the small farmers and white tenants. Knight remarks on this point:

In theory the ideals of political democracy began to appear early and were strongly revealed by the beginning of the national period, but the aristocratic conceptions and practices in education, so strong and wide in colonial times, continued to prevail until very recently as inheritances from the past.²

Little was done toward establishing state systems of public education in the South until after the Reconstruction Period following the War between the States. North Carolina included a provision for public education in its constitution in 1776, and Georgia in 1777.³ All the states admitted to the union after 1817 made provision for education in their constitutions. Virginia made no such provision until 1851. A general awakening of interest in this matter spread throughout the South during the thirties, but on account of the inertia, or actual opposition of the public leadership, it brought relatively few results. In many cases the federal funds that were derived from the sale of public lands were lost in bank failures or "borrowed" to pay general running expenses of government. Such public schools as were established were looked upon as being for the benefit of the indigent, and the term "pauper schools" or "common schools" continued to be used in a more or less derogatory sense. The private academies offered a stiff resistance to the development of public high schools in many communities. As late as the first decade of the present century their owners, patrons, and friends offered vigorous opposition to tax-supported high schools, and even yet, in some communities, attendance in a private academy is considered a social asset.

² Knight, Edgar W.—*Public Education in the South*. Boston: Ginn and Company, 1922, p. 44.

³ *Ibid.*, p. 119.

One distinctive advantage resulted from the southern type of local government. The influence of the planter class and scattered population made the county the important unit of local government. Instead of the village, with its central "green," its town hall, school, and "meeting house," the political life of the South was centered in the county seat, with its courthouse and surrounding public square. As a result, when the real development of public education started in the South, the county became the unit of organization and administration for the school system. Counties were often too small for greatest efficiency of administration, but they were far better than townships or local districts. In some states the control and support of education was shared between the county and district, but in most cases there was a "strong" form of county school administration, where all important functions were centered in the county. To the student of rural education and the worker in the rural field, this county type of school organization is a valued inheritance from the early South. It is the feature which has made for rapid progress in the development of rural schools throughout the South and is doing much to overcome handicaps along other lines.

LATER EDUCATIONAL DEVELOPMENTS AS THEY AFFECTED RURAL CONDITIONS

The closing decades of the last century and the first of the present witnessed a very rapid development of education in the cities of the United States. They were growing rapidly in population and wealth and all forms of public improvement were pushed forward with speed, if not with economy or with freedom from extravagance and graft. Water and sewerage systems, lighting and transportation facilities, public buildings and parks were provided at great expense. It was but natural that education should share in these lavish expenditures.

There had been a general awakening of interest in public education during the second quarter of the century, due in no small degree to the influence of Horace Mann. Elementary schools had been widened in their scope, public high schools had begun to replace the private academies, and normal schools were established for the training of teachers. Financial disturbances, the slavery agitation, and the War between the States checked these movements, but after 1870 a new interest developed. The influence of Herbart, Froebel, and other European educators began to affect the thinking of educational leaders, and the Philadelphia Exposition of 1876 brought many exhibits to this country that aroused not only professional but popular interest. The elementary schools in cities and larger towns were reorganized on the graded system, terms were lengthened, the curriculum enriched, teachers more adequately trained, and methods of instruction improved. High schools were quite uniformly made a part of the system, with curricula broadened to include much matter in addition to the formal college preparatory content of the academy. Almost all of the better trained students from normal schools were absorbed by the cities, with good effect upon the systems which they entered.

The rural schools of the country had but little share in the improvements that went on in the cities. The "little red school-house," more often unpainted than red, persisted as the usual educational equipment of the rural community. With its short term, its untrained or slightly trained teacher, its lack of organization, its poor housing and meager equipment, its curriculum offering little beyond the "three R's," this time-honored rural institution set the limit to formal education for the farm children of the nation for years after city children were given improved elementary schools and high schools. Few educators manifested interest in the improvement of rural schools. Consolidation was attempted in northern Ohio and Indiana, but

roads were poor, the township system was unsuited to meet the larger expenses involved, and trained leadership was lacking. The best teaching and administrative talent was being drawn into city systems, where money was available and success assured. The children of the farm seemed forgotten for a time.

Important population movements and economic changes were the basic causes for the slowness with which the improvement of rural schools progressed. In the East, rural communities were losing their most progressive members by migration to the richer agricultural lands of the Middle West, or to the cities. Farms from New England to Georgia were being abandoned because owners saw no future in them and found no buyers for them. The period brought a low-water mark to agriculture in the East and to rural life and institutions in that region.

In the Middle West, serious conditions were arising because of the too rapid development of the rich prairie lands of the Mississippi Valley. Farmers who had contracted heavy indebtedness at high rates of interest in order to develop their farms and equip them with machinery necessary to meet new producing conditions, found their profits going largely to pay interest and to replace farm machinery which frequently grew obsolete before it was worn out. Prices for farm products dropped, with consequent lessening of the farmer's ability to meet interest and payments upon mortgages. During the years from 1890 to 1920 the actual ownership of a great number of farms passed from the farmers to the loan companies, and the real equity of the farmers in the land which they nominally owned constantly decreased. Between the dates mentioned the number of farms that were mortgaged to some extent increased from 27.8 per cent to 42 per cent. This condition was made little better by "war prosperity," and during the decade following the World War farm debts increased from 29.06 per cent of farm values to 39.58 per cent.

From 1880 to 1900 the South was struggling to complete the reorganization of its life and its institutions which had been left in a chaotic condition by the Civil War and Reconstruction Period. A very low per capita wealth, the double task of providing separate schools for white and Negro population, and the gradually falling price obtained for the two chief money crops of the region—cotton and tobacco—made the financing of an efficient school system seemingly impossible. Added to their economic handicaps was the inherited attitude toward public education held by a great number of the leading citizens, who looked upon education for the masses as a personal luxury not as a public necessity. In 1900 the public expenditure for education per child of school age ranged from 50 cents in Alabama and North Carolina to \$1.46 in Florida and Texas. For the United States the average was \$2.48 per pupil. The average length of the school year in the South was less than 100 days; for the United States it was 145 days. Knight says of this period in the South:

The per capita expenditure for public education remained pitifully low throughout the period from 1875 to 1900 and provided only the most meager elementary educational facilities, and in the country districts of the South almost no public high school instruction was provided. The courses of study prescribed by the school laws in the various states had expanded, but the large number of poorly equipped teachers and almost total lack of supervision rendered such courses chaotic and ineffective. The teachers often taught whatever their whims or fancies suggested or whatever they thought themselves best prepared to teach. Some of them did the best they could, but most of them merely "kept school." At best the schools were imperfectly graded, and as a rule the methods of teaching were deadening and wasteful. The schoolhouses (especially in the rural districts) were often log or dilapidated buildings without windows, desks, tables, maps, charts, or blackboards. Backless benches were frequently the only furniture or equipment found in most of them.

The average value of rural schoolhouses in the South as late as 1900 was only about \$100. In view of the poor conditions which surrounded the schools it was fortunate that the term was short.⁴

This situation was deplorable, but the South was gradually recovering its strength and vision. By 1910 improvement was going on rapidly in every southern state and a progressive attitude toward public education had quite fully replaced the former attitude of opposition or indifference.

The first decade of the present century was to see the turning of the rural communities toward better schools, but for many years there was a feeling that approached hopelessness on the part of educational leaders in regard to the rural education situation. State courses of study were devised that retained the lock-step grade organization of the city schools but endeavored to make the crowding less serious in the one-teacher schools by correlation of subjects, subject-alternation, and grade-alternation. Conditions were made worse for rural communities by the higher salaries and better working conditions in the cities, which caused the best trained teachers to seek urban employment. Rural schools were taught by those who had taken a few terms in normal schools, by graduates from high school training departments, and by practically untrained teachers who entered the ranks by means of examination certificates. It is not surprising under such conditions that rural education became worse as compared with urban education, and that the Roosevelt Rural Life Commission of 1908 found the educational situation one of the most serious phases of the rural problem.

SUMMARY

Political, economic, religious, and intellectual oppression drove a great variety of people from their European homes to the un-

⁴ *Ibid.*, pp. 420-421.

known shores of America during the seventeenth century. These ranged from scholars and religious reformers on the one extreme to criminals and riff-raff from city slums on the other. Nature, Indians, and the leadership of a few dynamic personalities of the Puritan type molded those who landed on the rough, cold northern coast into a manufacturing and trading population, largely gathered into towns and villages. The southern stream, influenced by a mild climate, the wide coastal plain, and leaders with the aristocratic ideals of rural England, soon developed the plantation type of agrarian economy which was to dominate southern life for two centuries.

In the North the village type of life, the religious dissenter, and the small educated minority, produced a very democratic form of town government and resulted in the establishment of public schools and the congregational form of church organization. In the South the combination of plantations, small farms, white tenants, and Negro slave labor resulted in the development of a strong county government controlled by the planters. Private schools were established for the benefit of the wealthy, but little was done for the education of the masses. Each of these types of social organization moved westward with the result that the northern states developed public schools organized upon the township or district plan, while throughout the South the county was the controlling unit in educational matters as in all matters of political organization and control.

As a result of the differing types of social, economic, and political development in the North and the South, marked differences in educational opportunities and ideals had arisen in the two sections by 1860. The North had a fairly well established school system with the principle of tax support for education quite generally accepted, and with high schools supplementing elementary education in the cities. In the South, every state made some effort to establish a public school system before

the War between the States, but little real headway was made. Public schools were looked upon as being for the indigent, and the terms "pauper schools" and "free schools" often applied to them drove the better classes to patronize private institutions for the sake of social standing.

After the War between the States, public education developed rapidly in the North, especially in the cities. Rural schools lagged behind seriously because of the economic difficulties that affected the farmers during the eighties and the nineties. When the South emerged from the Reconstruction Period it resolutely faced the problem of providing separate schools for two races. Progress was very slow for the first thirty years but since 1910 rapid strides have been made. The task was a serious one, especially for rural communities, but the county form of government and support proved to be a great advantage and for a generation the South has definitely accepted the principle of tax-supported public education upon all levels and for all classes.

CHAPTER V

THE RURAL EDUCATION SITUATION TODAY

Before entering upon a discussion of the various specific problems that confront those who are interested in, and responsible for, the improvement of rural education, it may be well to consider briefly some of the more important social, economic, and educational conditions which have brought these problems into existence.

Four major factors have entered into the creation of the specific educational problems which affect the rural sections of the United States. Some of these factors have been discussed in the preceding chapters but will be restated here and treated from a somewhat different angle. These factors are: (1) the large proportion of children to adults in the rural community as compared with that in the urban; (2) the relatively low density of population in agricultural areas; (3) the low per capita wealth that can be drawn upon for the support of schools; and (4) what may be called the peculiar psychology of rural people.

RURAL AND URBAN POPULATION

As an introduction to the first of these factors it will be well to give a brief consideration to the population shifts that have characterized the past few decades. The most characteristic feature of these changes has been the steady increase in the proportion of urban population. The rapid increase in the growth of cities that began with the seventies, had brought the rural

population down to 60 per cent of the total by 1900. From this it fell to 54.2 per cent in 1910, and by 1920 had become a minority of 48.6 per cent. The next decade saw urban population rise to 56.2 per cent of our total population with the actual farm population falling to only 26.4 per cent of the total. Table I gives in detail the changes that have taken place. The rural village and town population are separated from the actual farm population.

TABLE I

*Changes in Urban Rural Farm and Rural Non-farm Population from 1920-1930*¹

	1920	1930	Change in Number	Change in Per Cent
Urban	54,304,603	68,654,823	14,640,220	+27.0
Rural, Farm	31,358,640	30,157,513	1,201,127	-3.8
Rural, Non-Farm	20,037,478	23,662,710	3,625,233	+18.2

The rapid increase in urban population during this ten year period was caused in large measure by the unprecedented increase in manufacturing which was due to the fact that we were engaged in providing equipment for the rebuilding of war-wrecked Europe, and at the same time developing new products such as the radio, the airplane, and new types of electrical equipment. Important attendant influences which stimulated the movement were the modern living conveniences with which city houses and apartments were being quite uniformly equipped; the development of low-cost amusements, such as the moving

¹ U. S. Census Report, Vol. III, Part 2, p. 65, 1930. Census reports before 1920 did not separate rural population into village and farm groups.

picture; and the greatly enlarged force of workers who were demanded to carry on the more complex business processes and more extensive commercial activities demanded by nation-wide and world-wide trade.

The actual decrease of farm population was the inevitable result of the operation of the factors affecting production per man on the farm, as discussed in Chapter II, coupled with the higher wages and more attractive life of the city. This population movement was largely from the southern and southwestern states, which are estimated to have furnished 60 per cent of those moving from rural sections to the cities. One-third of those migrating from the rural South were colored. The movement was heavy also from the southern and eastern corn belt states, Missouri, Illinois, Indiana, and Ohio. California, Massachusetts and Rhode Island were the only states showing a balance of movement toward the farms.²

The increase of 18.2 per cent in the rural village and town population during this period is most significant. It indicates that the rural village as a social and trade center is meeting a need, and that it will probably continue to be an important social and economic factor in our nation. Kolb and Brunner say of it:

The village finds itself at the crossroads for city travelers and visitors from other villages. Therefore, in a real sense, it faces, Janus-like, both the country and the city, having the characteristics of each. Most important of all, the villages have come to occupy an enlarging place in the rural community during the last decade.³

These authors further point out that the village seems to have become quite stabilized during the last two decades and taken

² Baker, O. E.—"Utilization of Natural Wealth," Chapter II, *Recent Social Trends*, Vol. I. New York: McGraw-Hill Book Company, 1933, p. 111.

³ Kolb, J. H., and Brunner, E. de S.—"Rural Life," Chapter X, *Recent Social Trends*, Vol. I. New York: McGraw-Hill Book Company, 1933, p. 509.

on a form of life intermediate between the city on the one hand and the open country on the other, combining many of the good features of each. In this way it will prove a medium for co-ordinating the life of country and city and of serving as an organizing center for rural life. Improved roads, the automobile, telephone, rural mail delivery, and the modernization of homes made this rural unity possible. To these unifying influences are being added those of the consolidated schools, an improved type of village-farm church, and better service from the village to the farm and the farm home. In many rural counties the farm telephone gives service to almost every home and place of business in a county, and in some cases over a wider area. In the author's ⁴ study of rural intelligence the median intelligence of the 269 village students tested was markedly higher than that of the 1072 students who lived on farms; the number showing superior intelligence larger, and those of very low intelligence levels lower. This indicates a tendency for migration to villages to be selective and makes the village population of especial value as a source of leadership for the combined farm-village community.

As to the type of service rendered by village people, investigations have shown that 78 per cent of those employed are classified under four occupations, namely: manufacturing, trade, agriculture, and transportation, with manufacturing accounting for about one-third of the total.⁵ The large showing for manufacturing is caused by the inclusion of carpenters, painters, plumbers, mechanics, and others in this classification. The professions provide a large part of the remaining 22 per cent with teachers holding the largest proportion in that group.

⁴ *Rural Intelligence in Relation to Rural Population*. Nashville: George Peabody College for Teachers, 1929, p. 51.

⁵ Kolb, J. H., and Brunner, E. de S.—"Rural Life," Chap. X, *Recent Social Trends*, Vol. I. New York: McGraw-Hill Book Company, 1933.

Another matter of importance in relation to the educational problems of the rural community, is the distribution of population as to age groups. The character of this distribution in urban, rural farm, and rural non-farm groups is shown in Table II.

TABLE II

Age Distribution of Population for Urban Rural Farm and Rural Non-farm Groups for 1930⁶

Ages	Urban		Rural Farm		Rural Non-Farm	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
-5	5,626,000	8.2	3,341,000	11.1	2,477,000	10.5
5-9	6,211,000	9.0	3,780,000	12.5	2,617,000	11.1
10-14	5,950,000	8.6	3,741,000	12.4	2,314,000	9.8
15-19	6,015,000	8.7	3,421,000	11.3	2,116,000	8.9
20-24	6,420,000	9.3	2,434,000	8.1	2,016,000	7.8
25-29	6,170,000	9.0	1,819,000	6.0	1,843,000	7.8
30-34	5,773,000	8.4	1,672,000	5.5	1,675,000	7.1
35-44	10,706,000	15.5	3,432,000	11.4	3,060,000	12.9
45-54	7,714,000	11.2	2,959,000	9.8	2,345,000	9.9
55-64	4,777,000	6.9	1,105,000	6.5	1,105,000	6.9
65-74	2,559,000	3.7	457,000	3.7	1,056,000	4.5
75-	964,000	1.4	186,000	1.5	502,000	2.1

An examination of the above figures reveals the fact that the rural villages stand midway between the farms and the cities

⁶ *United States Census Report, Population, Vol. I.* Washington, D. C.: Government Printing Office, 1930, pp. 588-591.

in population distribution according to age. The elementary school groups, ages five to fifteen, comprise 24.9 per cent of the farm population, 20.9 per cent of the rural village population, and 17.6 per cent of the city population. On the other hand, the age groups from twenty-five to fifty-five, which are supposed to represent the period of maximum producing ability, include 32.7 per cent of the farm, 37.7 per cent of the rural village, and 43.5 per cent of the urban population. Expressed in numbers these percentages indicate the presence of nearly 2,000,000 more children of elementary school age among our approximately 30,000,000 farm population than are found in a corresponding urban population. A similar comparison of the age groups having a maximum producing power shows an excess of 3,257,000 in an urban population equaling the present rural population of the United States.

RURAL AND URBAN WEALTH

The inability of dominantly rural states to support a system of public education equal to that supported by dominantly urban states is shown in Table III, for five states of each type.

Little study is needed to derive from this table some significant facts covering the relative ability of urban and rural communities to support an adequate system of public education. A tax levy of 50 cents on the hundred dollars of assessed valuation in New York would bring \$48.40 revenue for each child of school age within the state, while an equal levy upon the wealth of the state of Mississippi would bring only \$6.10. The group of five dominantly urban states would derive an average of \$36.70 per child of school age from a \$.50 tax levy, while the five rural states would only derive \$8.02 by a like levy upon their wealth.

The inability of rural states to provide adequate educational facilities for their children is made greater by the actual re-

TABLE III

Total Taxable Wealth School Population Per Cent of Rural and Urban Population and Per Capita Wealth Subject to Taxation for Each Child of School Age, 1930[†]

<i>Dominantly Urban States</i>	<i>Population</i>	<i>Taxable Wealth in Millions</i>	<i>School Population</i>	<i>Per Cent Urban</i>	<i>Per Cent Rural</i>	<i>Wealth per School Child</i>
N. Y.	12,588,066	27,035	2,792,806	83.6	16.4	\$9,680
Penna.	9,630,350	12,645	2,549,904	67.8	32.2	4,975
Mass.	4,349,614	7,234	999,699	90.2	9.8	7,250
N. J.	4,041,334	6,829	985,274	82.6	17.4	6,930
Conn.	1,606,903	3,010	402,773	70.4	29.6	7,470
Total or Average	32,087,287	56,752	7,730,443	28.9	21.1	7,340

<i>Dominantly Rural States</i>	<i>Population</i>	<i>Taxable Wealth in Millions</i>	<i>School Population</i>	<i>Per Cent Urban</i>	<i>Per Cent Rural</i>	<i>Wealth per School Child</i>
Tenn.	2,616,556	1,842	752,173	34.3	65.7	\$2,570
Ala.	2,646,248	1,238	817,365	28.1	71.9	1,513
Ga.	2,908,506	1,303	894,723	30.8	69.2	1,568
Miss.	2,009,821	743	613,148	16.9	83.1	1,212
Ark.	1,854,482	624	606,048	20.6	79.4	1,211
Total or Average	12,264,613	5,750	3,583,457	26.6	73.4	1,605

[†] Derived from data found in *United States Census Reports*, 1930. Also the *Biennial Survey of Education*, 1928-30, Bulletin 20, Vol. II, 1931. Washington: United States Office of Education, p. 44.

moval of wealth from them by the migration to cities of those who have just reached an age of maximum producing power. Accepting the estimate of Baker⁸ that it costs an average of \$2000 to rear and educate a child to the age of fifteen, the 3,500,000 migrants from the farms of the South to urban and industrial centers during the last decade removed \$7,000,000,000 of wealth from rural areas into cities, chiefly those of the north central and eastern states.

It is evident from the facts presented above that if the United States is to maintain the ideal: *an equal opportunity through public education for each child within the nation, regardless of race, residence, or economic condition*, it must adhere to the equally important principle: *levy the tax where the wealth is and expend the funds where the children are*.

RURAL AND URBAN SCHOOL FACILITIES

With the facts in regard to rural and urban population in the United States what they have been shown to be, it is not surprising that the facilities for education offered the two types of population should be markedly different. Not until the principle of the general responsibility of society for the education of all of its children is put into actual operation, can conditions be other than they now are. The differences in the schools provided for rural and urban children are greatest in the poorer rural regions, but when national averages are compared the rural handicap is shown to be very serious. Figures for the school year 1931-32 follow.⁹

1. Rural children had the privilege of attending school for an average of only 132.4 days a year, while city children had an average

⁸ Baker, O. E.—"Utilization of Natural Wealth," Chap. II, *Recent Social Trends*, Vol. I. New York. McGraw-Hill Book Company, 1933, p. 111.

⁹ *Biennial Survey of Education*, 1930-32, Bulletin 2, 1933. Washington: United States Office of Education, Chap. I, pp. 104-119.

of 156.9 provided for them. This gave rural children 24.5 fewer days of schooling per year than city children or a total deficiency in schooling of 196 days during the eight years of the elementary school.

2. The per capita investment in school property for rural children was \$143 while the amount invested for city children was \$353. This means that the amount invested in school property for each rural child was only 40.8 per cent of the amount invested for each city child.

3. The amount expended annually for maintenance of schools in rural communities was \$64.39 per child of school age, but for cities the amount so expended was \$108.93 or 59.1 per cent as much per rural child as per city child.

4. The annual per capita outlay for the improvement of rural schools was \$7.24, while for city schools the amount was \$11.61, a disadvantage to rural schools of 37.6 per cent.

5. The average salary of teachers employed in rural schools was \$930, while for city teachers it was \$1951, showing an expenditure of only 48.7 per cent as much for teaching ability in rural schools as for that in city schools.

6. The average rural elementary school enrolled 57 pupils with 2.1 teachers employed, but the average city elementary school enrolled 487 pupils with 15.4 teachers employed.

7. There were 148,712 rural communities which were served by one-teacher elementary schools, while only 72,337 were served by schools with more than one teacher.

A direct result of the low salaries and poor teaching conditions found in rural communities is the poorer training and shorter average term of experience for rural as compared with urban teachers. Table IV gives facts in regard to the training and experience of rural teachers in various types of rural schools.

It will be noted that the percentage of teachers having four or less years of training is highest for those employed in one-teacher schools and lowest for those employed in village schools. For

those with six or more years of training above the elementary school, however, the condition is reversed, increasing from the low mark of 24 per cent in the one-teacher schools to 71.3 per cent in the village schools. The figures as to years of experience

TABLE IV

*Training and Experience of Rural White Teachers in Different Types of Schools*¹⁰

<i>Years of Training Above Elementary School</i>				<i>Years of Experience</i>					
<i>Type of School</i>	<i>Four or Less</i>	<i>Five</i>	<i>Six or More</i>	<i>None</i>	<i>One</i>	<i>Two</i>	<i>Three</i>	<i>Four</i>	<i>Five or More</i>
One-Teacher	43.2	31.8	24.0	24.3	17.1	13.2	9.6	7.6	28.2
Two-Teacher	35.8	25.1	39.1	13.5	14.0	13.4	10.8	8.9	46.4
Three-or-More Teacher	27.9	20.7	51.3	11.5	11.8	12.7	11.0	9.8	43.4
Consolidated	18.6	13.3	68.1	13.5	12.5	12.8	11.6	10.1	39.5
Village	16.5	12.2	71.3	13.1	11.9	12.3	10.6	9.3	42.9

(Based on data gathered from 156,809 teachers)

show that one-teacher schools receive the largest proportion of beginning teachers. Even more significant is the fact that only 45.4 per cent of teachers having three or more years of experience are found in the one-teacher schools, while from 62.2 to 64.2 per cent of teachers with that length of experience are found in large unit schools.

These figures indicate the seriousness of the handicap with which rural children enter upon life, so far as formal school advantages are concerned. Even though there are elements in

¹⁰ Gaumnitz, W. H.—*The Status of Teachers and Principals Employed in the Rural Schools of the United States.*

the rural environment that in a measure compensate for these disadvantages, society is negligent of its own best interests when it fails to supplement every advantage inherent in the environment of rural children with a type of formal education which will bring them to their best, as individuals and as citizens.

RURAL SCHOOL ACHIEVEMENTS

The efficiency of rural schools, as indicated by promotion and retardation, shows a marked relation to the training and experience of the teachers employed in them. The table presented below shows the situation as to the promotion of pupils in rural and city schools in North Carolina for the school year of 1927-28. The author remarks that in that state, "General conditions are typical of those found in the records of other states."¹¹

TABLE V

*Percentages of White Pupils Promoted in Each Grade of Elementary Schools in Rural North Carolina and in Urban Communities of North Carolina During the Year of 1927-28*¹²

<i>Type of School</i>	<i>Grades</i>							<i>Average</i>
	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>V</i>	<i>VI</i>	<i>VII</i>	
Rural	52.0	67.4	67.2	64.9	64.3	64.2	60.6	61.7
Urban	69.1	77.9	78.5	77.7	78.8	76.9	78.8	75.9
Excess of Urban Promotions	17.1	10.5	11.3	13.8	14.5	12.7	18.2	14.2

The rural, as compared with urban, schools of North Carolina show an excess of failures of pupils to earn promotion varying

¹¹ Kyte, George C.—"Pupil Status in Rural Education," *30th Year Book, N.S.S.E., Part I*, pp. 29-30.

¹² *Loc. cit.*

from 105 per thousand in the second grade, to 182 per thousand in the seventh grade, and an average of 142 per thousand. This excess of failures in the rural schools is unquestionably due in very large measure to poor teaching, shorter terms, and the many grades which rural teachers are required to teach. Such a condition represents a loss in money and citizenship to society, and a loss in opportunity in life to children.

Retardation figures for urban and rural schools of Tennessee are shown in Table VI, with figures for rural schools given for the various types as found in that state.

If the percentage of normal and accelerated pupils is an indication of good teaching, and the percentage of retarded pupils an indication of poor teaching, it is evident from the above table that city teaching is better than rural teaching and that rural teaching improves as the school unit increases in size. The length of term doubtless is responsible for some of the increase in the percentage of normal pupils and the decrease of retarded ones, but that alone is not enough to account for the better showing of city schools. When elimination figures are taken into account, the differences in pupils that make normal progress and those who become retarded are more significant. There is a tendency, always, for the retarded child to become discouraged and drop out of school. The one-teacher rural schools of Tennessee retained only 32.2 per cent of the annual first grade entrants to the eighth grade in 1932-33; the average for all rural schools was only 43.7 per cent, but the city schools of the state retained 62.3 per cent to the eighth grade.¹³

Standardized achievement tests have revealed the fact that rural schools generally fall below accepted standards in school achievements. The results obtained by the recent survey of the schools of Tennessee¹⁴ may be taken as quite typical of condi-

¹³ See Chap. X, Table X, p. 166.

¹⁴ *Report of the Tennessee Educational Commission, 1934*, pp. 53-62.

TABLE VI

*Retardation Figures for Elementary Schools of Tennessee for the School Year of 1932-33. Figures for Third, Fifth and Seventh Years Omitted for Convenience as They Show Slight Variations*¹⁵

		4th Grade		6th Grade		8th Grade		Total	
	Pupils	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Rural One-Teacher Schools	Total	9,478		6,754		4,720		20,952	
	Normal	3,959	41.7	2,931	43.5	2,032	43.2	8,922	42.7
	Accel.	561	6.1	482	7.0	355	6.9	1,398	6.7
	Ret'd.	4,958	52.2	3,341	49.5	2,333	49.9	10,632	50.6
Rural Two-Teacher Schools	Total	10,721		8,026		6,834		25,590	
	Normal	4,777	43.3	3,734	46.7	3,015	44.3	11,526	41.1
	Accel.	731	9.3	602	7.2	481	6.6	1,864	11.1
	Ret'd.	5,213	47.4	3,690	46.1	3,338	49.1	12,241	47.8
Rural Three-or-more Teacher Schools	Total	21,392		17,857		13,979		53,938	
	Normal	11,364	53.0	9,766	54.6	7,185	51.3	28,282	53.4
	Accel.	1,866	8.9	1,656	9.5	1,560	11.4	5,082	9.2
	Ret'd.	8,162	38.1	6,435	35.9	5,234	37.3	19,831	37.4
City Schools	Total	14,944		13,431		10,987		39,359	
	Normal	9,414	62.8	8,308	59.6	6,507	59.1	24,229	62.1
	Accel.	1,095	7.6	1,146	12.0	1,260	11.7	3,501	8.5
	Ret'd.	4,435	29.6	3,967	28.3	3,220	29.2	11,631	29.4

¹⁵Annual Report Department of Education, State of Tennessee, 1932-33, pp. 186-188 and 196.

tions prevailing in rural schools. This survey was made during the school year of 1933-34 and included seven tests given to five grades in one-teacher, two-teacher, and three-or-more teacher rural schools. Out of the total of 105 tests given the rural pupils the standard grade norm was reached in only thirteen cases. Ten of these standard scores were made by the fourth and fifth grades; two by the sixth; one by the seventh; and none by the eighth grade.¹⁰ These results were obtained eight years after the state had established an eight-month rural school in most of its counties and, therefore, cannot be attributed to a materially shortened school year. It seems evident that this inability of rural pupils to attain standard norms in achievement was due, in large measure at least, to poor teaching and inadequate school facilities.

Excess child population, low per capita wealth, the small investment in school property and annual running expenses, inadequately trained and inexperienced teachers, and the serious elimination of pupils and the retardation of those who continue in attendance—all factors in the present rural conditions—indicate certain general fields for improvement with which students of rural education must concern themselves.

THE RURAL MIND

The psychic factors which enter into the rural problem seem to be both hereditary and environmental. The process of selective migration from the farm, touched upon in Chapter II, has apparently resulted in a lowered average mentality in rural sections. This is probably less serious than some investigations have indicated, but sufficient even in good agricultural regions to justify Campbell's query, "Are we developing a peasantry in

¹⁰ Unpublished data obtained by the Tennessee State Educational Commission, 1934. See Chap. X, Table XI, p. 169.

the United States?"¹⁷ By peasantry is meant a rural population of so greatly reduced mentality as to bring about a state of resignation to the hard conditions of farm life. That this peasantry condition is developing, and is more or less inevitable, is a view seemingly accepted by some writers of prominence in the rural field. Wilson says of farming, "It is a hard industry for which man has to be prepared by an austere mind. It is a hereditary industry in that a good farmer is usually the son and grandson of farmers. Only by religion can families be held to the severe tasks of farming for generations, against the enticements of other careers more lucrative and less exacting."¹⁸ To the author this view seems not only unwarranted but dangerous. As well ask the coal miner to work under hard conditions and for an inadequate wage for religious motives as to ask the farmer to do so. Spiritual rewards for spiritual service are entirely proper, but no man has a right to be asked to endure hardship and poverty from a religious motive while employed in an essential form of human service. In so far, then, as low mentality may be found to be a characteristic of the rural mind, those interested in rural betterment must set themselves positively and intelligently to the task of changing the conditions that have brought it about. Modern American leadership, especially in the field of education, must not accept the principle that in our rural districts there will inevitably develop great occupational groups of lowered intellectual ability.

With the idea fairly stated and accepted, that a lowered rural intelligence is not to be recognized as a necessary factor in rural life, but is to be corrected as an unthinkable evil, we may pass on to the matter of the less fundamental psychic factors

¹⁷ Campbell, Macy—*Rural Life at the Crossroads*. Boston: Ginn and Company, 1927, p. x.

¹⁸ Wilson, Warren H.—*Rural Religion and the Country Church*. Chicago: Fleming H. Revell Company, 1927, p. 7.

that enter into the rural problem. The methods by which a reversal of the processes responsible for the lowering of the general level of rural intelligence may be brought about, will be taken up in the chapters dealing with the rural curriculum and other phases of instructional improvement.

We are now ready to inquire as to what are the more important peculiarities in the rural mind which have been directly produced by environmental conditions. Sorokin and associates¹⁹ quote from L'Houet the following as important mental peculiarities of the European peasant: Traditionalism, familyism, impersonality, stolidity, frugality, piety, conscientiousness. While these may be characteristic of the peasant class of Europe, the writer does not believe that they are characteristics of the American rural dweller. There are only three characteristics that would seem worthy of consideration because of their relation to the major rural problems. These are: (1) a strong individuality; (2) a high degree of inquisitiveness; and (3) a tendency to be suspicious of others.

Rural Individualism.—Human beings differ very materially in the degree of social-mindedness which they possess. Some are happy only when in company of others and seek every possible opportunity to mingle with a crowd. Others enjoy being alone and avoid places where many people are gathered. These differences may be hereditary, or due to training, but regardless of their origin they have important influences upon life. Cities have a powerful attraction for those who are strongly social in disposition. The sorting process resulting from the city's attraction for the socially minded tends to make city residents more co-operative and progressive and those dwelling in the open country less so.

So long as agriculture was a self-dependent industry, no evils

¹⁹ Sorokin, P. A., Zimmerman, C. C., and Galpin, C. J.—*A Systematic Source Book in Rural Sociology*, University of Minnesota Press, 1932, Vol. III, p. 69.

resulted from the segregation of the non-socially inclined to the farm communities of the nation and the socially inclined to the cities. But as modern conditions developed, demanding co-operative efforts along the lines of production and marketing, serious consequences were manifest. Farmers were slow to organize, ineffective in co-operation, and quick to drop back into the rut of individualism. Groves says of this situation:

The study of country life reveals the increasing importance of the gregarious attitude in modern life by showing clearly the handicap that rural life carries because of its non-gregarious characteristics. The situation today emphasizes the need for more organization and better organization in the country. Organization awakens and stimulates the gregarious interests, and the gregarious instincts furnish an indispensable basis for organization. It is the gregarious instinct, primarily, that draws people into associations and holds them in contact until a degree of common sympathy results. Occasionally it happens that individual farmers have so long suppressed their gregarious tendencies that they find themselves unable naturally to organize with their fellows. It requires some tremendous economic pressure to bring these persons temporarily under the influence of organization. If country life were to become so destitute of organization that the majority of farmers no longer felt any gregarious hunger, not only would organization become impossible in the country, but the farmer would be excluded from the large part of modern life.²⁰

In other words, Groves believes that a continuation of conditions such as now exist may result in the formation of a true peasantry of stolid incapacity.

Excessive individualism has a number of serious results. It prevents co-operation in matters of economic, social, civic, and religious progress. It makes leadership difficult, except through

²⁰ Groves, Ernest R.—*The Rural Mind and Social Welfare*. Chicago: University of Chicago Press, 1922, pp. 186-187.

an appeal to prejudices and fixed convictions. It tends to isolate individuals, families, and communities even more than they are naturally isolated by the sparsity of population. It is frequently a powerful contributing influence in driving youth with strong social interests from the farm, thereby increasing the influence of the non-progressive elements in rural life. It was a valuable asset in the pioneer days, when homes had to be built in remote regions, and the nearest neighbors were often miles away. It is an undesirable trait, however, in a day when co-operation and social integration are essential to successful living. Educational agencies need to recognize the seriousness of excessive individualism and use every means for eradicating it from the personalities of the young. An amount of individualism which gives a proper degree of self-assurance and independence is valuable, but when present in excess it makes separated grains of sand out of human integreis, which should be cemented into the solid rock of social unity by the adhesive power of recognized social interdependence.

Rural Inquisitiveness.—Inquisitiveness, or curiosity, is a characteristic which seems to be one of the inherited mental attitudes possessed to a greater or less degree by human beings. Rural people may not be born with an undue proportion of it, but the environment in which they live tends to preserve and develop it. The environment of the city resident is in very large measure the product of man's own constructive genius. It is noisy, gaudy, rushing, and exciting. Those who live in it rarely find time to watch it in admiring ease, or seek to understand its inner processes and more delicate relationships. Even the thoughtful are inclined to go about their business, intent upon the attainment of an immediate end rather than the understanding of basic causes. The rural dweller lives in a very different environment. About him there is much quiet. The corn makes no haste in pushing through the soil, nor do apples make haste

in ripening. He is conscious of the fact that "the wind bloweth where it listeth," that the dew falls in silence, and that the birds must await with patience the pipping of the egg. Farm life is a busy life, but there is always time for wondering as to the inner nature of things, and for seeking answers to the riddles of life. These two divergent influences, which illustrate one of the important differences between urban and rural life, tend to lead in the one case toward the superficial and material; in the other, toward things fundamental and spiritual. The rural influences, however, if acting upon the ignorant, may result in superstition, prejudice, and narrow-mindedness instead of in those characteristics which are socially and individually desirable.

The rural environment on its social side is calculated to develop, on the part of the ignorant, a love for gossip and scandal. People of the neighborhood, being very well known to each other, are inclined to let no delicate feeling stand in the way of gratifying the inquisitive urge. The attitude of curiosity, combined with lack of information or with misinformation, produces a wide range of superstitions and beliefs. The better educated respond to this environment by careful observation and thinking in regard to the physical and biological forces with which they are surrounded. Such thinking and observation result in the development of habits, attitudes, and ideals of great value. To the skilled teacher this rural characteristic affords an invaluable opportunity. Curiosity opens a furrow through the child's mind into which may be placed the seed that will develop into intellectual achievement, character, and personality.

The author does not claim that there is scientific proof as to the exactness of the statements made above, but intimate association with rural people in many sections, and under various social and economic conditions, convinces him that acceptance of them will provide a valuable working basis for those who serve the rural communities.

Rural Suspicion.—The attitude of suspicion is closely associated with that of excessive individualism. A life of relative isolation engenders the feeling that those not indigenous to the locality are enemies, or at least, fit objects for suspicion. The suspicious person is also inclined to feel that the stranger will endeavor to "put something over" on him. Suspicion constitutes a strong factor in making co-operative organizations ineffective, since there is an inclination to look for deceit or fraud where none exists. It fortifies prejudices, especially political and religious ones, and makes a fertile ground in which the demagogue and the doctrinal zealot may cultivate dissensions by an appeal to resist proposed change. Rural conservatism is helpful when tempered by intelligent judgment, but dangerous when it merely resists change without information or judgment. The unreasoning adherence to the old is largely due to a deep-seated mistrust of those who propose the new.

Those who work with rural people in the fields of education, religion, social development, or economic improvement must not make the mistake of thinking that they are dealing with minds markedly different from the average of the race. They do need to keep in mind, however, that they are associated with a group of people who react to various situations and experiences in a manner quite different from that which would be observed in an urban group. These rural folk must never be thought of as "queer people," but as normal human beings who have acquired a certain mental set and attitude as a result of an environment differing markedly from that in which city people live. This difference will range from that which is almost indistinguishable in the best rural communities, to one so striking as to almost indicate a different race in the ultra-rural population found in the more secluded mountain valleys of the Appalachian highlands.

SUMMARY

Four major influences have brought about the rural educational situation which exists in our country today. These influences are: (1) the large proportion of children as compared with adults that make up rural population; (2) the low density of rural population; (3) the low per capita rural wealth; (4) the mental characteristics of rural people.

The rural population of the United States became smaller than the urban population during the second decade of this century. During the third decade urban population increased 27 per cent, rural village population increased 18 per cent, and rural farm population *decreased* 3.8 per cent. The South and the Southwest furnished the largest part of the number who migrated from farms to cities during this time. The rural village took on a new importance during this time, not only in population, but in the service it rendered to the surrounding farm population.

The educational burden that falls upon the rural sections is indicated by the fact that in 1930 the elementary school age group—those between five and fifteen years—was 24.9 per cent of the total rural population, 20.9 per cent of the rural village population, and 17.6 per cent of the city population. The financial ability of the rural states to educate this excessive proportion of children for which they are directly responsible, is very low as compared with the ability of urban states to meet their educational obligation. The five dominantly industrial states of New York, Pennsylvania, Massachusetts, New Jersey, and Connecticut, have an average wealth per school child of \$7,340, as compared with a wealth of \$1,605 per school child in the five dominantly rural states of Tennessee, Georgia, Alabama, Mississippi, and Louisiana.

The unequal opportunity of the rural child to secure an education is indicated by the low investment in, and small annual

expenditure for, rural schools; the lower level of training and more limited experience of rural teachers; and the poor results obtained in rural schools, as shown by the large amount of retardation found in them, the lack of holding power they show, and the poor scholastic achievement of their pupils.

In addition to the lower level of general intelligence, which a number of studies have shown to be characteristic of rural people, certain mental peculiarities are generally found to exist among them in excessive degree. The more important of these are: a strong individualism, a high degree of inquisitiveness, and a tendency toward suspicion of others. These peculiarities are probably a combined result of heredity and environment, but regardless of their origin they must be taken account of by teachers and others who are concerned with the improvement of rural life. These mental characteristics are responsible for much of the conservatism and lack of effective co-operation found among farmers, and also for the element of social stability which a rural population usually gives to social institutions.

CHAPTER VI

THE ORGANIZATION OF RURAL EDUCATION

FUNDAMENTAL PRINCIPLES INVOLVED

Rural teachers and citizens interested in the fullest development of rural life and institutions should become familiar with the trends of thought and practice relative to the problems involved in rural school organization and administration. There may not be full agreement among authorities concerning the ultimate solution of these problems, but there is a very general harmony of opinion as to certain fundamental principles. The more important of these general principles may be stated as follows:

1. The unit of organization should be large enough to make possible an efficient administration without imposing an unreasonably high unit cost.
2. The unit of organization should comprise a sufficient number of schools to make thoroughly efficient professional organization possible at a cost as low as is compatible with the best interest of the children being educated.
3. The business and professional organization should be such as to insure:
 - a. Direct and sensitive reflection of enlightened public sentiment, made effective through the agency of a representative board of control.
 - b. The direction of all professional activities by an adequately trained, capable, and fair-minded professional rep-

representative of the board, who shall be held responsible by the board for educational results along the general lines which they, as representatives of the citizenship, have approved.

- c. The largest possible amount of freedom, on the part of the board of control and its professional representatives, from political influences and personal ambitions that might operate to the disadvantage of the children who are served by the administrative unit.

As was brought out in Chapter III, two general types of rural school organizations have developed in the United States. The prevailing type in the North is the small-unit district, town, or township organization, with only a limited amount of county control, or in some cases none. In the South the county predominates, combined frequently with a small amount of local district autonomy.

During the early years of the development of the United States, when public education was as simple and inexpensive as was the life of the people for whom it existed, there was small need for concern as to what type of organization should be employed. Within the past half century, however, the situation has changed radically. The length of the school term has been increased, buildings and equipment have become matters of far greater expense, teachers' salaries and qualifications have been raised, and high schools have been added to the system which serves the masses. As a consequence of these changes, a constantly increasing proportion of the tax dollar has gone into the establishment and maintenance of schools. Citizens who had been accustomed to think of public education as being a relatively unimportant part of the civic organization, have awakened to the fact that the schools constitute a major concern, and that they are in need of constructive reorganization. During this period of rapid development the management of schools has

become a complex professional problem rather than a mere matter of business honesty and clerical accuracy which guarantees adequate accounting and records.

Much progress has been made during the past few decades towards determining the principles which should be followed in establishing the best form of administrative and supervisory organization for the schools of the rural sections. An attempt will be made in the remaining pages of this chapter to set forth a plan for rural school organization that embodies those principles.

There are two conditions that must be faced in the solution of this problem. One is found in those states where a county form of school organization exists. The other, and more difficult one, is met with in states which have the town, township, or district form of organization. The problems involved in each will be taken up separately.

THE COUNTY FORM OF SCHOOL ORGANIZATION

There is general agreement among students of rural school organization and administration that the county unit has very marked advantages over the small-unit system. It seems to meet quite well, in the great majority of cases, the standards set forth on page 72, and in addition serves in a small way to equalize educational burdens and opportunity. In some cases counties are too small for an economical school administration, but there is a strong movement, in most states where small counties exist, to do away with this evil by a consolidation or combination of counties for general economy and efficiency of government. This movement, when achieved, will remedy the school situation also. More will be said of this later. As an argument against the county unit it may be pointed out that the most progressive states, educationally, do not have it. This condition is very evidently due, however, to the fact that the county form of educational organization is found most largely in the South. Here,

public education has practically come into being during the last sixty years,¹ hindered very seriously by a low per capita wealth, a high percentage of rural scholastic population, and a dual system of education demanded by the peculiar race situation resulting from the abolition of slavery. Not only have these conditions hindered progress under the county unit, but in many cases the form of organization itself has been poor, and calculated to prevent its effective operation. Furthermore, the fact that the county throughout the South has been, from the first, a powerful political unit of government has made it quite natural that political influences should act strongly to control educational matters within them. Because of these difficulties under which the county unit has functioned, it is important that a very clear and definite conception of what it may be at its best should be given to those interested in rural educational progress.

The County Board of Education.—The public school is the essential foundation upon which a democratic society is built, and for that reason it should be pre-eminently democratic in its organization and control. It exists *for the people* and must be *of the people*. Because of this there must be that direct and sensitive reflection of enlightened public sentiment in it that is essential to a truly democratic functioning.

Selection and Number, Compensation and Representation, of the County Board.—In order to have this direct sensitiveness to public opinion, the board must be elected by direct vote of the people. It has large responsibilities and extensive powers to spend the money of the people. Therefore, of all the agencies of local government, it should be in the fullest measure a creation of the people. As a means of divorcing the board as fully as possible from politics, party or personal, the election of its members should be at a time other than that at which general officers for county and state are elected.

¹ See Chap. IV, p. 42.

The number of board members should be small, five or seven usually being considered ideal, and the representation should be general, not from districts. This general representation is considered best because the election of members by the voters of a specific area, to represent that area, tends to make the board member think and act in terms of the welfare of the section which he represents rather than of the entire county. General county representation has the added advantage that it does not bar two persons from membership who may live in the same section of the county. The objection often made to the plan of general representation is that it will tend to place the control of schools in the hands of a political faction or "ring," that will use its power for personal or political advantages. Such a condition is always possible with an uninformed and disinterested citizenship, but it is by no means a necessary accompaniment to the plan of general county representation. A serious evil that often accompanies the district form of representation is the tendency of the members to trade votes by means of which three or four members of the five or seven frequently control the board.

There exists throughout the South a variety of methods for securing the county board. In Tennessee the members are elected by the county court; in Georgia they are appointed by the grand jury; in New Mexico, by the district judge; in Maryland, by the governor; in South Carolina, by the state board of education; in Virginia, by a special commission of three; in Mississippi, by district trustees. Appointment by the court is an especially pernicious system, as it results, sooner or later, in the control of the board, and therefore of the schools, by the court. In this case the people never consciously vote on school questions for the election of the member of the court involves other issues, and the average voter does not realize that when a vote is cast for a court member, power is really being given to control the schools of the county. There are cases where a poor system gives good

results, and a good system poor results, but it is wise to set up that system which tends most strongly toward good results. As to the length of term that the board member should serve, it is usually best to elect one each year, with as many years to serve as there are board members. In case the number of members is seven it is probably best to elect two on each of three successive years, and one the fourth year. If the number be nine, two should be elected on each of four successive years and one the fifth year. By this method members would serve four or five years instead of seven or nine.

Specific objective statements of the qualifications which members of boards of education should possess are difficult to formulate and to apply. There have been many attempts to fix qualifications by statute, but there are serious objections to this practice. If there is an educational qualification, based upon a certain amount of schooling, it by no means assures qualified candidates, and often eliminates those who are well qualified. Other forms of qualification such as "known for integrity and business judgment," or "an outstanding citizen known for high character and interest in public education," rest upon the judgment of the voter in applying them and are usually of slight value. A direct vote, independent of political considerations, for a board member, upon whom rest specific and unavoidable responsibilities, usually results in the selection of members who meet the approval of public judgment. If the judgment of the voters under such circumstances is unsatisfactory it rests upon the intelligent minority to put the facts before the public in such a manner as to change conditions for the better. The indifference of the intelligent minority to their responsibility for the opinions of the majority of the voters probably constitutes the greatest social peril that exists in the United States today. Efforts to avoid this peril by any formal letter of law are likely to prove futile.

Functions of the County Board.—Legislation should provide a simple, clear, and unequivocal statement as to the functions which the board shall perform. There are three functions which are of paramount importance, and should be stated in such terms as would make evasion or subversion impossible. These are:

(1) *Responsibility for the school budget.*—The board is the direct representative of the voters in the management and financing of public education and should, therefore, have entire control of business matters connected with these functions. The budget should, of course, be prepared in detail by the superintendent, as their executive officer, but full responsibility for its provisions should be assumed by the board before the public. Levying a tax sufficient to meet the budgetary requirements is a matter that often gives trouble. In many states some other board has sole power to levy tax. In some instances, however, the levy recommended by the school board is mandatory, and the tax-levying board has power neither to modify the budget nor to refuse to levy the tax required to meet it. This is as it should be for the control of the schools is taken from the board whenever the power to make a budget and provide the funds to meet it is given into the hands of another board or an individual. The board is responsible directly to the voting and tax-paying citizenship and if it attempts to expend too much money for the service rendered, a new board can be elected that will reflect public opinion. Where the court controls the taxing power, many evils will result. In one case known to the writer, the court, in its desire to "cut the budget" struck out the entire item for fire insurance and instructed the board not to renew policies when they expired. During the two years following this act, two buildings, valued at a total of \$75,000 were burned, with insurance of only \$5,000. If the board had had control it would never have taken this risk in regard to the property for which it was directly responsible, but the court, which was not thought of by the public

as having control of the schools, was able to overrule the judgment of the board by its power to control the tax rate.

(2) *Appointment of the county superintendent.*—The power to select the county superintendent is one of the most important functions that the school board can possess, and one that it should always have. If the superintendent is elected by the people, or is appointed by some person or group other than the school board, he will not be amenable to the board. Such a condition often results in a lack of harmony between the board and superintendent, and an uncertainty on the part of the public as to where authority and responsibility actually reside. If the board is elected by the direct vote of the people, and the superintendent is selected by the board, there can be no question as to the board's responsibility for the schools or the duty of the superintendent to be subordinate to the board. If the board and the superintendent cannot work together harmoniously it is the duty of the board to find a superintendent with whom it can work. In case the board is in the wrong the voters will have the power to pass ultimate judgment at the polls. The board should be given freedom to seek where it wishes for a person of ability, character, and experience to serve as superintendent. It should be restricted only by statutory regulations governing age, academic and professional training, and experience. In no other way can the rural schools be provided with an efficient professional administrative control. An elective superintendent is, of necessity, a resident of the county which elects him, and there is little likelihood that a county court, or other appointing body, will go outside of the county to secure such an official. Only by providing for a superintendent appointed by the board can there be developed a professional group of county superintendents to serve rural schools. Young men and women will not train specifically for this field of service if they are to be restricted to their home counties for employment. On the other hand, if the county superin-

tendent is appointed by the board with no restrictions as to place of residence at the time of appointment, there will be the same chance of advancement because of successful achievement in this field as there is in city superintendency and in other teaching, supervisory, and administrative positions.

(3) *Selection of teachers.*—The method by which teachers are selected is a matter of vital importance in the rural community. Because of the great influence of personal friendships, family connections, and political expediency, there is probably a greater danger of favoritism in the selection of rural teachers than in the selection of teachers for cities. This makes it absolutely necessary to take the power to control the appointment of teachers out of the hands of the county board. They should have the responsibility for final election, but not for the initial selection. This power should reside solely with the superintendent. Under no circumstances should it be possible for the name of an employee who is in any way connected with the instructional activities of the schools to come before the board for consideration except upon nomination by the superintendent. He has access to records which show the training and experience of applicants; he has met those who have worked in his system in teachers' meetings and in personal conference; he has visited the schoolrooms of those who have taught in the county; he has reports of supervisors or principals upon the character of the work they have previously done; and he has on file in his office scholastic reports which were made out by each teacher who has had previous employment in the county. With the professional training and experience which most states require the superintendent to have, it is folly to believe that any member of the board could judge the qualifications of an applicant as well as the superintendent. It may be asked then, "Why submit nominations to the board at all? Why not leave everything to the superintendent?" The answer is simple. The board has final responsibility for the ac-

tion of the employees who work under it. The superintendent might lack judgment or knowledge which members of the board possessed in matters other than professional qualifications of applicants. It is conceivable also that he should be prejudiced, or inclined to show favoritism. In either of these cases, the approval of the board would serve as a protection against his judgment and his lack of integrity.

Board members should not be paid a fixed salary, but they should receive a small per diem for services, not to exceed a small fixed amount per year, an amount too small to make the position financially attractive. Under such circumstances holding membership on a board of education will be in the nature of a personal sacrifice which can only be offset by the satisfaction that accompanies the rendering of a high type of public service. If, however, the appointment of teachers is placed in the hands of the board of education, selfish motives will lead men of small ability and low ideals to seek board membership for personal advantage. This desire for personal gain sometimes goes so far as to cause members actually to demand money in exchange for a position, and more frequently it takes the form of nepotism and various kinds of petty graft. The only safe attitude for a board member to hold in regard to the employment of teachers is that the superintendent is the professional advisor of the board and that no teacher will be considered for election who is not nominated by the superintendent. It should not be assumed, however, that the board will elect without question every teacher the superintendent nominates. The board members' judgment as to general fitness is as important as is the superintendent's judgment as to professional fitness. The selection of teachers is a joint responsibility of board and superintendent, and neither should evade it.

The members of a well-organized board will perform many

duties other than those discussed above, though those are the most essential to the successful conduct of a county school system. Special ability on the part of any member of the board should be utilized.

The County Superintendent.—The superintendent is the key man of the county system. His chief duties have been discussed in connection with those of the county board. In addition to these major duties assigned him, he must be responsible for all of the detailed administration of the schools under his care. He should be a person of appropriate training, experience, ability, character, and personality. His salary and working conditions should be in keeping with his very important responsibilities.

SMALL UNIT ORGANIZATION

States which have their rural schools organized on any form of small-unit plan face a serious difficulty. In the older sections of the country, where settlements were established before the region had been laid off by surveyors in mathematically regular blocks, small units are usually not so objectionable because they are determined by natural features. In the Middle West and West, however, the situation is different. Here township lines have absolutely no relation to natural features of topography or drainage, and as a result more frequently than not, cut across community boundaries. Where a change from the district or township form of organization is practicable it should be brought about.

Deffenbaugh² quotes the following from the Survey of Rural Education in South Dakota, made by the Federal Emergency Relief Administration in regard to the advantages which that state would probably receive by the adoption of the county unit for school administration:

² Deffenbaugh, W. S.—"Educational Notes," *School Life*, October, 1936, 22: 61.

1. Save \$300,000 a year for instructional purposes by the election of a single county board of education.
2. Equalize the cost of education throughout the county by a uniform tax levy.
3. Eliminate small school districts, simplify enrollment and attendance and permit the organization of transportation routes in the most practical and economical way by the abolition of district boundary lines.
4. Make possible large economies in the cost of operation and maintenance.
5. Free the county superintendent, as executive officer of the county board of education, from the necessity of negotiating with scores of boards, resulting in economy of time, in apportionment of funds, in preparation of reports, etc.
6. Free the superintendent to give better service and improve the status of the teachers.

In many cases a change from the small unit of school organization to the county unit is practically impossible, because custom and tradition are opposed to a unit of school organization that is not to any great degree recognized in other phases of government. This situation was found by the Survey Commission of the state of New York³ some years ago. The district system was so strongly intrenched in custom and the thinking of the people that the Commission did not so much as attempt to secure the county as a unit of rural school organization. Instead, they proposed a compromise in the form of the community unit. This unit was to be laid out by a local commission appointed by the County Board of Supervisors, and placed under the control of a community board which would be composed of the trustees from the various districts to form it. Such a board would frequently be large, but it was to be given power to reduce its own numbers. It was anticipated that eventually this provision would

³ *Rural School Survey of New York*. Ithaca: 1922, pp. 208-211.

bring about a true community board, elected directly by the new district as a whole rather than by the separate vote of its component parts. An intermediate board was also proposed by the New York plan to serve as a connecting link between the community unit and the State Department of Education. It was to be composed of a member elected from each community unit within its jurisdiction, and was to handle such matters as supervision, curriculum formation, consolidation, and the determination of community boundaries. The functions of these three units of organization as proposed were as follows:⁴

LOCAL DISTRICT BOARD	COMMUNITY BOARD	INTERMEDIATE BOARD
1. Elect community district trustees, unless number is reduced.	1. Make budget and levy tax. (f)	1. Select district superintendent.
2. Pass upon continuation or abolition of local district.	2. Select and place teachers on nomination of superintendent. (f)	2. Levy tax for administrative and supervisory activities.
	3. Power to close school for one year. (f)	3. Re-define boundaries of community units.
	4. Approve curriculum, largely through contributions and adoption of teachers.	4. Approve consolidation plans.
	5. Selection and adoption of text books. (Not to	5. Select and adopt text books.

(f) By action of the full board, only.

⁴ *Loc. cit.*

LOCAL DISTRICT BOARD

COMMUNITY BOARD

INTERMEDIATE BOARD

conflict with rules
of intermediate
board.)

- | | |
|---|--|
| 6. Construction of new buildings.
(f) | 6. Adopt curriculum not in conflict with the requirement of the state. |
| 7. Purchase of supplies. | 7. Establish and maintain libraries, not in conflict with the state. |
| 8. Establish and increase libraries.
(Not to conflict with rules of intermediate board.) | |

(f) By action of the full board, only.

The chief advantages of such a community unit, as stated by Mueller are:

1. It gives a natural system of organization, based upon community lines.
2. The unit is large enough to provide sufficient resources for an efficient school, including high school.
3. It includes a town or village already supported by the community where the wealth of the community tends to collect, and now in turn draws upon it to help support the schools of the community.⁵
4. It provides a natural location for a high school, and makes it

⁵ Note: In many cases this condition is reversed and the rich farm lands aid in providing better schools for a none-too-prosperous village population. This was often the situation in Illinois at the time the law referred to below was passed.

possible for all to have high school privileges. It also provides for community participation in the affairs of the school.

5. It prepares the way for complete consolidation of schools.

6. It brings about a union of town and country, and fosters a real community spirit.

7. It provides for the unified control of the schools of the community under the community board.⁶

The state of Washington⁷ has employed the community unit as a means of improving the organization of rural schools. It is estimated that in that state the number of school districts could be reduced to one-fourth of the present number, and that by doing this better community relationships would result, consolidation of schools would be greatly facilitated, and community centers provided. Illinois⁸ has used the community idea in developing its rural high schools. The township system in operation there made the development of rural high schools very difficult. The unit was too small in most cases to make a high school economical, and in many cases the natural village centers were located on the edge of a township, with its contributing territory extending into other townships. The law was so modified as to make it possible to form a high school district regardless of township lines, with the result that the number and quality of rural high schools increased very rapidly.

While the county has certain advantages over the large community unit as a form of rural school organization and support, the latter method of securing a more effective and economical administrative system for rural schools is of great value to those states where the small-unit school district is established by existing laws and traditional influences.

⁶ Mueller, A. D.—*Progressive Trends in Rural Education*. New York: The Century Company, 1926, p. 43.

⁷ *Ibid.*, p. 44.

⁸ Johnson, Charles H.—*The Modern High School*. New York: Charles Scribner's Sons, 1916, p. 45.

The general principal involved in uniting small units into larger ones for the purpose of securing greater efficiency at a lower unit cost can be applied to advantage in uniting counties which are too small to make the most desirable unit. Three counties in the state of Tennessee which could be united into a single administrative organization to the advantage of each, educationally and financially, illustrate this point. The administrative district resulting from such a union would have an area of 984 square miles and a teaching staff of 36 high school and 103 elementary school teachers. At the present time these three counties pay their superintendents an aggregate of \$4,075. The general administrative cost for the three units amounts to \$2,240. If a single superintendent were paid \$2,500 and the one system expended \$1,120, or 50 per cent more than the average for the three, on other administrative expenses, there would be a balance of \$2,695 to spend upon supervision. This would maintain two efficient supervisors for the union district employing 103 elementary teachers. These counties are served by excellent state highways, and it is not more than thirty minutes' drive from the central county seat to either of the others. Another county could be united advantageously with these three, as its county seat is only ten miles from the one where the office of the superintendent would be located, with a good highway connecting them. This additional county would bring the area of the entire school unit up to 1313 square miles, and the number of elementary teachers to 196. The fourth county pays its superintendent \$2,500 per year. If it were added, the salary of the union superintendent could be increased to \$3,000, and the remaining \$2,000, plus the \$789.40—office expenses of the fourth county—would be sufficient to add two good supervisors to the system. The compensation and expenses of the boards in the four counties amounted to \$725 for 1932-33, a sum much in excess of what these items would be for a single board serving the union district.

In many other cases two counties could be united for educational organization with a resulting combined area and total number of teachers much smaller than are found in a number of single counties in the state. If such a system of forming union districts out of adjacent counties in Tennessee were generally carried out, it would be an easy matter to reduce the units of rural school organization from the present number, 95, to well below 50.

There is at the present time, as was mentioned earlier in this chapter, a general agitation of the question of uniting the small counties of the older states in order to cut the cost and increase the efficiency of local government. Since this movement is meeting with not only strong positive opposition but also with the resistance of inertia, a long time may elapse before it attains results. If, however, school union could be achieved between counties which would naturally be merged or affiliated in the general program, it would not only give immediate improvement of schools, but serve as an object lesson in the value of larger administrative units of government.

SUMMARY

School organization should be such as to provide a maximum quality of business and professional efficiency at the lowest possible unit cost. States and larger cities meet the above conditions. Counties sometimes meet them, but townships and districts never do. Frequently counties are too small to provide satisfactory units and in such cases there should be a union of counties to form administrative units.

The ideal organization for a county consists of a small elective board, each member elected by the vote of the entire county, and a professional executive officer working under the general direction of the board. The board should have general business control of the schools, approve the annual budget and general school

policies, levy tax to meet the budget, and elect teachers and other employees on nomination of the professional and executive officer. Board members should receive a per diem compensation for attending meetings, but not a fixed salary.

States having township or district form of rural school organization should make provision by means of which such units may combine for administrative purposes. New York has made provision for the formation of such unions, and since the enactment of the law authorizing them many large districts have been formed and rural school efficiency materially increased.

CHAPTER VII

THE FINANCING OF RURAL EDUCATION

The inability of the rural community to give its children an educational opportunity equal to that enjoyed by urban children was shown in Chapter V. The problem of adequate financial support for the rural schools will now be taken up in greater detail, and considered in the light of the facts brought out in former chapters, as to the rural community's ability to pay.

The per capita wealth of rural communities will probably always be lower than that of cities. The producing power of the farm is determined in a large measure by land area, and though acre-production varies greatly from forest and grazing lands on one extreme to market gardening and small fruit lands on the other, the money value of acre-production is much lower than that of areas devoted to manufacturing or mining. Improvements in soil fertility, animal and plant breeds, and methods of cultivation have materially increased the producing power of the farmer's acre, but the increase in the producing power of non-farming agencies has more than kept pace with farm increases. It is to be expected, therefore, that the per capita wealth of rural communities will continue to be far below that of urban and industrial regions.

If the democratic ideal permitted the neglect of the poorer sections of a state by the richer ones, a permanent low-class farm peasantry would ultimately result in the United States. A high level of general education is recognized as essential to a

stable and advancing democracy. The only tenable ideal for a democratic society, therefore, must be: *All the wealth of the social group must be taxed for the education of all the members of the group.* Wealth is a social, not an individual product in modern society, and it tends to concentrate in centers far from the places where it is produced. Commercial and industrial cities are such centers of concentration. New York is a general center of concentration, profiting from all the factors that are concerned in the process of wealth-production on a worldwide scale. Chicago, Philadelphia, and other great cities are general centers similar to, but somewhat less important than New York. Other cities owe their wealth to a certain type of concentration; as, for example, Hartford, Connecticut, as an insurance center; Detroit as an automobile center; and Akron as a center of tire manufacture. Similarly every city serves as a concentration point for wealth which it does not produce. This means that rural communities, mining towns and villages, small industrial centers, lumber camps, and other similar producing communities face a problem in financing public education which is far beyond the ability of their taxable wealth to meet. They produce wealth, but it is removed from them before it can be taxed for local school purposes. In some cases large corporations that operate industrial plants in small communities draw from their general resources for the support of education, but farming communities receive no such benefits. If such communities secure aid for carrying on the work of education, it must come from money collected by large taxing units and apportioned to them by some form of distribution that will equalize educational opportunities.

Up to the present time the state has been the unit of administration and taxation which has most effectively served as an agency for equalizing the advantages and the burdens of public education. In practically all states the responsibility for maintaining a system of public education has been written into the

constitution. This responsibility was often seriously neglected in the early days, but now it constitutes a major governmental obligation. There has been considerable agitation for federal aid for education, but up to the present time this has been provided as a general policy only for the aid of such types of education as the teaching of agriculture and home economics in Smith-Hughes rural high schools, and related types of training for cities. Counties do a considerable service in equalization in states where they are the unit of school administration, but they are too small to afford material relief.

The serious need for an ample state fund for equalizing educational opportunities and burdens is readily shown by facts that may be drawn from practically any state. The greatest inequalities exist where there are the smallest units of school control. In Michigan,¹ where the township system is partially employed, ninety school districts in the state have a taxable wealth of less than \$750 per census child, while twenty-six districts have a taxable wealth of more than \$25,000 per census child, a ratio of 33 to 1 between rich and poor districts. The ninety-five counties of Tennessee have a range in wealth per census child from \$4,670 maximum to \$628 minimum, a ratio of roughly 7.5 to 1 between the richest and the poorest counties.² A tax levy of 50 cents on the hundred dollars of assessed valuation in the poorest county of the state would give \$3.14 toward the education of each child. In the richest county the same tax levy would provide \$23.35 for each child's education. If the poor county wished to procure as much money per child by local tax as the rich county procures by the 50 cent levy, it would have to levy a tax of \$3.50 on each hundred dollars of its taxable wealth, a school levy wholly out of reason.

¹ Statement obtained directly from State Department of Education, by Harry Nesman. Letter to the author, October, 1935.

² Data obtained from various tables in Annual Report of Education, State of Tennessee, 1933-34.

Tennessee shows a corresponding inequality within its counties. A county that ranks among the richest six of the counties of the state, has a variation of per capita wealth per school child among its twenty-five civil districts—corresponding in a general way to townships—of from \$3,024 in the richest to \$620 in the poorest, a ratio of approximately 5 to 1. If a tax of 50 cents on the hundred dollars were levied on these districts for school support the poorest would receive \$3.10 per child while the richest would receive \$15.12.

The need for equalization of educational opportunities between the states of our nation is almost as great as is the need for it between counties within states, and between townships or districts within counties. A re-examination of the data presented in Chapter V will reveal the need for a federal equalizing fund if there is to be any semblance of equality of opportunity so far as school training goes. This may not come for some time, but the activity of the federal government in financing many types of public improvement during recent years is preparing the public mind for the adoption by the government of a policy of aiding public education in the states of low per capita wealth.

There are two major problems connected with the financing of public education. The first involves finding a source from which ample funds may be secured from year to year with the least possible cost for collection, the smallest disturbance of the public mind, and the largest degree of uniformity. The second involves the devising of a scheme for distributing state and federal school funds in a manner that will achieve most fully the fundamental purposes for which public education is maintained.

SOURCES OF SCHOOL REVENUE

A direct tax upon real estate is probably the least desirable means of securing school funds, but in the past it has been the one most commonly used. The opposition to this form of tax is

due in some measure to inherited attitudes, but more largely to the fact that this method of securing funds for supporting an institution of such general service as the public schools is fundamentally unsound. A recent federal report makes the following statement upon this question:

That the general property tax has been overworked as a source of revenue is an accepted truism today. Since localities depend chiefly upon this type of tax for their revenue, and since, as has been pointed out, localities have borne the brunt of the burden of increased school cost, there is an imperative need for states, in their process of raising revenue, to tax other forms of wealth, if localities are to be relieved.³

Swift says:

The general property tax as a source of school revenue stands condemned not only by every leading authority in the field of taxation but by numerous state tax commissions composed of men eminent in business and public affairs. Scientific students of public finance and members of state and city tax commissions are in general agreement also in recommending the adoption of the newer types of taxes such as income taxes, corporation taxes, and severance taxes.⁴

Chambers expresses a similar view:

Modernization of the state taxing system slowly continues as income taxes, sales taxes and other similar types replace the overworked general property tax.⁵

Mort says:

It is believed that by and large the states which leave the property tax to localities have provided better financing for their schools than

³ Covert, Timon.—*Biennial Survey of Education, 1928-30*, U. S. Office of Education, Bulletin No. 20, 1931, Vol. I, p. 37.

⁴ Swift, F. H.—*Federal and State Policies in Public School Finance in the United States* Boston. Ginn and Company, 1931, p. 416.

⁵ Chambers, M. M.—"Recent School Legislation," *Nations Schools*, 16: 34, August, 1933.

states which use the property tax as an important source of state revenue.⁶

Table VII, derived from a table included in the study made by Covert, indicates the trend in methods employed for obtaining school revenue.

TABLE VII

*Percentage of State Revenue Receipts Derived from Various Types of Taxation for the Entire United States*⁷

<i>Type of Tax Collected</i>	<i>Per Cent of Revenue</i>	
	<i>1919</i>	<i>1928</i>
General Property Tax	30.2	25.1
Business Licenses	10.8	14.4
Motor Vehicle Licenses	10.2	13.6
Motor Fuel Tax	0.0	12.5
Earnings of General Departments	12.3	7.4
Inheritance Tax	5.8	6.5
Special Property Tax	8.6	5.4
Income Tax	0.7	2.9
Earnings of Public Service-Enterprises	0.4	0.7
All Other Revenues	21.0	11.5

This table shows quite definitely the tendency to shift taxes from general property to other forms of wealth. For the year 1927-28 the part of school expenses borne by states was 16.4 per

⁶ Mort, Paul R., et al.—*State Support of Public Education*. The American Council of Education, Washington, D. C., 1933, p. 227.

⁷ Covert, *loc. cit.*

cent.⁸ This varied from a minimum of 1.8 per cent in Kansas to a maximum of 83.4 per cent in Delaware. In twelve states, less than 10 per cent of the total school revenue is obtained from the state and in nine states 30 per cent or more is so derived. Up to 1929 there was a marked tendency to increase the proportion of the total school expenditures that came from local sources but since that time the trend seems to have been in the opposite direction. Local taxes, where not levied for sinking fund purposes to insure payment of bond issues, are likely to vary in response to local conditions, and are in danger of being reduced or even discontinued during periods of financial depression.

If public education is to be adequately supported, those in charge of its fiscal administration must find new sources of revenue that may be substituted for a property tax as a means of providing school funds. Such sources must also free local communities from the excessive amount of the school burden that falls upon them at present. If new sources cannot be found, there must be an increase in the rate levied against some or all of the sources now being utilized.

There has been a tendency to employ certain new taxes for providing general state revenue and school revenue during the past few years. The more important of these follow:⁹

Income Tax.—This source of revenue was utilized by twelve states in 1928, producing from .004 per cent of the total state revenue in Oregon to 17.2 per cent in North Carolina, with a median of 2.9 per cent for the country as a whole. In 1928-29 the schools of Delaware received more than three million dollars from a state income tax, and the same year the Massachusetts schools received well above five million from that source.

Inheritance Tax.—Forty-four states levied an inheritance tax in

⁸ *Ibid.*, p. 35.

⁹ These data and those given in regard to other forms of tax were obtained from the *Biennial Survey of Education*, 1928-30, U. S. Office of Education, Bulletin No. 20, 1931, Vol. I, pp. 41-47.

1928, deriving from that source incomes ranging from .2 per cent of the total state revenue in Indiana and Florida to 17.4 per cent in Massachusetts, with a median of 6.5 per cent for the United States. The majority of the states turn this tax into the general fund from which much of the school fund is drawn, while others devote a certain part directly to education.

Sales Tax.—Up to the present time this tax has been levied largely upon special commodities such as gasoline and tobacco. All but two states levied a gasoline tax in 1928, getting from that source from 7.2 per cent of the total state revenue in New Jersey to 34.6 per cent in Florida. The median for the nation was 12.5 per cent of the total state revenue. Alabama, Arkansas, and Tennessee levy a special tax upon various forms of tobacco, the proceeds of which are turned into the school fund. There seems to be a trend toward a general sales tax, which, coupled with a graduated income tax, may prove a most equitable and unobjectionable means of providing general and school revenue.

Severance Tax.—This tax is relatively new but has been adopted by a number of states. It is levied upon the value or amount of natural wealth removed from within the earth or from its surface, such as iron, coal, gas, and timber. In some states the money derived from such a tax has been set apart for education. Alabama, in 1927, levied a severance tax of 2.5 cents per ton on coal, 4.5 cents per ton on iron ore, and 3 cents per ton on "all other minerals mentioned in the act." The proceeds of this tax were set apart as an "Education Trust Fund." Arkansas levied a tax of 2.5 per cent on the gross value of all products subject to tax except on coal, which was taxed 1 cent per ton; timber taxed 7 cents per thousand board feet, and manganese ore taxed 10 cents per ton. Kentucky, Louisiana, Oklahoma, Texas, and Pennsylvania made use of the severance tax before 1929. Pennsylvania levied a tax of 2.5 cents per ton on anthracite coal in 1915, reduced it to 1.5 cents in 1921, and abolished it in 1928.

Other taxes that may become important in the future are those levied upon the production of hydro-electric power, and those assessed against railways, telegraph and telephone companies, express companies, and various forms of amusements and luxuries. Much is yet to be done in this field.

Data as to the sources being drawn upon by a number of states for the support of education will be of interest to those who may be immediately concerned with problems of school finance. The facts presented were taken from *The Tax Systems of the World*,¹⁰ 1934 edition, and all figures are as of January 1, 1934.

Alabama:

Property, 3-mill tax. All for schools.

Sales, on tobacco products, hydro-electric energy, near-beer. All for schools.

Severance, 2.5 cents per ton on coal, 4.5 cents per ton on iron ore, 3 per cent on value of sand, clay, gravel. All for schools.

Other, 2.5 per cent on receipts of railway, telephone (above \$50,000), telegraph, express, \$20,000 license tax on Pullman and other car companies operating in the state. All for schools.

Arizona:

Property, .85-mill tax on assessed valuation of all tangible property. All for schools.

Arkansas:

Property, 3-mill tax. All for schools.

Income, 1 to 5 per cent on net individual. Two per cent on corporation net income. Part for schools.

Sales, \$2.50 per thousand on cigarettes, 1 cent on retail selling price. Part for schools.

Severance, 2.5 per cent on value of products severed from the soil except manganese and timber. Seven cents per thousand board feet of timber cut. Two-thirds for schools.

¹⁰ Tax Research Foundation.—*Tax Systems of the World*, Fifth Edition. Chicago: Commerce Clearing House, Inc., 1934, pp. 168-171.

California:

Method of taxation not specified. State required to raise \$60 per pupil in average daily attendance on elementary schools, \$90 for those in average daily attendance on high schools.

Indiana:

Property, .7-mill tax on all tangible property. All to schools.

Mill tax sufficient to take care of teachers' retirement fund; 2.5-mill tax on value of all intangibles; 75 per cent to schools.

Sales, varying rates on malt and alcoholic beverages. All to schools.

License, on various amusements and sales of alcoholic beverages.

All for schools.

Louisiana:

Property, 4.15-mill tax, all for schools.

Sales, 1 cent per gallon on gasoline, 3 cents per pound on malt extracts, \$1.50 per barrel on beer, ale, and wine. All for schools.

Severance, tax at specified rates on natural resources removed from soil or water. Part to schools.

Tax on chain-stores from \$15 for the first five stores, to \$200 on each store over fifty. Balance for schools after Parish bonds are cared for.

Massachusetts:

Income, personal tax of 1.5 per cent on income from business and annuities, 3 per cent from dealing in intangibles, 6 per cent from interest on dividends. Not ear-marked.

Minnesota:

Property, 1.38-mill tax. All for schools.

Income, 1 to 5 per cent on personal and corporate incomes. All for schools.

Sales, .05 per cent to 1 per cent on gross sales of chain-stores in excess of exemptions. All for schools.

Severance, 6 per cent on value of iron ore produced at mines. 50 per cent for schools.

License, on chain-stores, \$5 on each in excess of one, to \$155 on each in excess of fifty. All to schools.

North Carolina:

State required to raise enough money to support state minimum standard schools for eight months. (Taxing methods not specified.)

Oregon:

Property, .24-mill on the dollar, tax on all taxable property. All for schools.

Sales, 1.5 per cent on retail sales. All for schools.

South Dakota:

Income, .25 per cent on gross income from manufacturers and wholesalers, .5 per cent on incomes of livestock dealers, 1 to 2 per cent on wages and salaries, 1 per cent on all other incomes. 50 per cent for schools.

Washington:

Property, must levy sufficient to provide, when added to other incomes, the amount of 25 cents per pupil per day of attendance.

Sales, on gross proceeds at classified rates. All up to \$12,500,000.

Property tax is used directly in raising school funds by twenty-four states. Other states may use it indirectly for providing that part of the school fund paid from the general fund.

Income tax is used directly as a source of school money by twelve states. It is the only special school tax in Mississippi and Wisconsin.

Sales tax of some form is used by seventeen states. In four states it is on tobacco products and alcoholic beverages only.

Severance taxes are levied for school purposes in eight states. Minnesota has the highest rate, 6 per cent on the value of iron ore at the mines, 50 per cent of which goes to schools.

Inheritance tax appears in the laws of but three states as a special source of revenue for schools.

Licenses of various kinds are provided in eleven states for the benefit of schools.

A special tax on chain-stores, for school purposes, is levied by

five states, the rate ranging from \$2 in West Virginia to \$500 in Idaho.

A DEFENSIBLE MINIMUM PROGRAM FOR PUBLIC EDUCATION

Before taking up the problem of the distribution of state school funds, consideration will be given to the nature of the school program which a state should undertake to provide. This is a complex problem which cannot be solved by adopting the practice of any state or country. No system can be accepted as ideal, and consequently a theoretical solution must be proposed which embodies the best practices and the soundest theory. Many factors enter into determining what constitutes an adequate school, and the factors involved will vary greatly in the various parts of the United States, and in the different sections of any state.

Mort and his associates, in their reported study of state support for education, say that they have "assumed that an expenditure of a fixed number of dollars under similar conditions will purchase similar or comparable educational service in any part of a state."¹¹ An entire chapter of the report mentioned is devoted to explaining why this assumption is made, but the principle will be accepted here, without further comment, that the money expended per teaching unit is a fairly satisfactory measure of the school opportunity offered.

Mort¹² proposes three possible programs for education that a state may consider in its effort to equalize educational opportunities within its borders. These are: (1) a minimum program represented by the amount which is being paid to the lowest ten percentile group within the state; (2) the defensible minimum program, which is the actual program financed by the communities of average wealth, and (3) an ideal program which would

¹¹ Mort, Paul R., et al.—*State Support for Public Education*. U. S. Department of Education, Washington, D. C., 1933, p. 46.

¹² *Loc. cit.*

be that quality and amount of education provided by the most able districts within the state. Two of these programs are discarded by the authors, the first because it is too low a standard, the third because it would seem to be beyond attainment. The second is proposed as a basis for equalization. The ratio of the actual minimum program to the defensible program in 32 states for which data were available ranged from .404 in Kansas to .859 in Nevada. The median ratio between the two programs was .629.¹⁸ Expressed otherwise, in order to provide the defensible program, Kansas would have to increase its school fund 147 per cent, Nevada would have to increase its fund 4.8 per cent and the entire group of 32 states would have to increase their funds 59 per cent. The additional money required to bring the expenditures of these states up from the actual minimum program to the defensible minimum varies from \$161,328 in Nevada to \$15,311,639 in Illinois. The median was approximately \$2,400,000 and the total for the group was \$115,431,844.

In concluding the discussion of what standard a state should undertake to provide, Mort points out that the mere furnishing of money will only make possible, it will not insure, adequate educational opportunities. He says:

Viewed as an educational problem, it is obvious that the doubling of an expenditure level in a number of districts cannot be effected merely by making funds available. A high level of expenditure is of no value except as it is reflected in a type of educational program which the increased expenditures should buy. The higher levels of expenditure should therefore be reflected in more highly trained teachers, more adequate organization, more effective educational leadership, more efficient educational service, better administration of the classroom situation, and a variety of other improvements which cannot be brought about immediately. If the needed improvement is to come to pass, these changes must occur; and for their

¹⁸ *Ibid.*, p. 61

occurrence a certain amount of time must elapse. The time will vary with the type, kind, and intensity of educational leadership in the state.¹⁴

If the United States is going to maintain its educational standards, and meet the situation that seems certain to arise from the effort of government to abolish child labor and reduce the hours which adults may work so as to give all an opportunity to secure employment regardless of the development of machine production, the best thinkers of the nation will need to exert themselves upon the solution of the problem.

THE DISTRIBUTION OF STATE SCHOOL FUNDS

Quite as important as the sources from which school funds may best be obtained, and the method by which they may be the most equitably and surely collected, is the method of distributing these funds throughout the state. Since school funds are collected and distributed for the purpose of securing for the state a desirable type of citizenship, such funds should be applied to those budgetary items of the greatest importance to the state as a whole, and to those which would suffer most from fluctuations in revenue due to a demand for relief from local taxation. In order to achieve this end the state would have to bear a large proportion, if not all, of the cost of instructional service, as well as a liberal share of the cost of instructional equipment and materials. The local community would have to bear the major portion of the expenses for capital outlay, maintenance cost, debt service for debts which had been contracted for permanent improvement, and transportation; and it would also have to bear at least a portion of the cost of administration. The educational items which local taxation would have to finance could be curtailed with far less loss to the children concerned than could the instructional service which the state would provide. If the funds expended by

¹⁴ *Ibid* , pp. 88, 89.

the state for instructional service are obtained by some form of taxation other than by a general property tax, there will be little public clamor for decrease in teachers' salaries, reduction of the number of teachers employed, or a shortening of the school term, because of depressed economic conditions.

Principles Governing Distribution of State School Funds.—A number of very definite results should come from a state school fund properly distributed. Chief among them are:

1. An equalization of the opportunities for education so that all children within the state may have an approximately equal chance for their fullest individual and social development.
2. An equalization of the burdens of education, so that poor sections will not need to pay a higher rate of tax upon their wealth than do the citizens of richer sections.
3. The stimulation of local effort for school improvement by a definite reward for such effort, and in proportion to its amount as expressed in rate of taxation.
4. A reward to the local community for good attendance and the maintenance of a long school term.
5. A reward to the local community for the employment of teachers of superior ability and training, and the enrichment of the school curriculum.
6. An improvement in the efficiency of the schools through state administration and supervision of instruction that goes along with financial aid from the state.
7. The unification and co-ordination of educational effort throughout the state to the end that the best results may be obtained in the type of citizenship which the schools turn out.

The first two items in the above list are of the greatest importance in securing adequate educational opportunities for "all the children of all the people." If all sections of a state were approximately equal in per capita wealth, there would be no need for a state equalizing fund, but that is never the case. A state

like Iowa has its wealth distributed with a fair degree of evenness, but in such states as those that lie partly within and partly outside the Appalachian highland area, there is very great inequality of per capita wealth.

During the past few years there has been a very strong movement toward a large state school fund, distributed in such a manner as will achieve the ends listed above. The equalizing feature is emphasized in most cases, three-fourths of the states of the Union having some method for equalizing the cost involved in securing minimal educational opportunities. The following statements show the sources and amounts of the equalization funds made available by twenty states.¹⁵

Alabama:

Enacted a law in 1927 providing \$900,000 per annum. Funds obtained from tax upon railways, telephone, telegraph, express, hydro-electric power, coal and iron ore severance, sleeping cars, and tobacco.

Arkansas:

Enacted a law in 1927 providing \$1,500,000. Funds obtained one-half from tobacco tax and one-half from income tax.

Colorado:

Enacted a law in 1921 providing sufficient funds to guarantee a minimum salary of \$75 per month per teacher.

Connecticut:

Enacted a law in 1923 providing from 10 to 75 per cent of the teachers' salaries in certain towns. Appropriated from the general fund.

Florida:

Enacted a law in 1927 providing \$831,972. One-third from 1 cent tax on gasoline, .25-mill general property tax, and interest on state funds deposited in banks.

¹⁵ *Biennial Survey of Education*, 1928-30, U. S. Office of Education, Bulletin No. 20, 1931, Vol. I, p. 53.

Georgia:

Enacted a law in 1927 providing approximately \$1,500,000 annually. Funds obtained by .5 cent tax on gasoline and 1 cent on kerosene.

Kentucky:

Passed an act in 1930 appropriating \$1,250,000 annually but the law was declared unconstitutional in 1932.

Michigan:

Enacted a law in 1927 providing \$2,000,000. Money is appropriated from state's general fund.

Mississippi:

Enacted a law in 1926 providing \$2,477,968 annually. Money appropriated from state's general fund.

Missouri:

Provides approximately \$1,710,000. Money obtained from state school fund.

Montana:

Enacted a law in 1927 providing \$328,672. Money obtained from one-half of the income from inheritance tax and tax on metal mines and oil production.

New Jersey:

Enacted a law in 1926 providing 10 per cent of state school tax.

New York:

Enacted a law in 1925 allowing difference between allowance per teacher and proceeds of a local 6-mill tax. From state general fund.

Ohio:

Enacted a law in 1923 providing a fund of \$4,000,000 from state general fund.

Oklahoma:

Enacted a law in 1927 providing fund of \$1,500,000 from one-sixth of the proceeds from gross production tax on minerals, not to exceed \$1,500,000.

South Carolina:

Enacted a law in 1924 providing fund, the difference between total scheduled expense for teachers' salaries and proceeds of a 7-mill county school tax. Amounted to \$3,500,000 in 1930.

Tennessee:

Enacted a law in 1925 providing fund of \$800,000 from tobacco tax. Increased to \$1,824,356 in 1932.

Texas:

Enacted a law in 1930 providing fund of \$2,500,000, appropriated from state general fund.

Virginia:

Enacted a law in 1930 providing for fund of \$500,000 appropriated from state general fund.

Nine of the twenty states laws shown above were enacted in 1927, or revised into their present form during that year. In only one state, Colorado, is the law as it stands at present more than fourteen years old. This indicates a very strong tendency to initiate the movement for state equalization of educational opportunity, or to modify the law governing it, during the present decade. Twelve of the states referred to draw the equalizing fund from the state general fund or permanent school fund, while eight provide it by some form of special tax. Kentucky's law was declared unconstitutional because of a statement in the constitution that "all state school funds shall be distributed to the counties on the basis of the number of children of school age." An amendment to the constitution of that state is now being contemplated in order that an equalization fund may be provided. Louisiana and Utah provided such amendments to their constitutions in 1930, and at present equalizing laws are in operation in both. Twelve states,¹⁰ California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Massachusetts,

¹⁰ *Ibid.*, p. 57.

Michigan, North Carolina, and Pennsylvania have appointed commissions to study state school financing. There has been a marked tendency to increase the amount of the equalizing funds during the past few years. The equalizing fund in the twenty states just referred to varies from 10 per cent of the total state aid in New Jersey to 88 per cent in North Carolina, with a median of 30 per cent.¹⁷

If it is the purpose of a state to give to each subordinate school unit an equal amount of money for each child under its control, the pupil per capita basis is satisfactory and simple in operation. If, however, the state school fund is looked upon as a means of equalizing local opportunities and burdens, of stimulating local effort, of rewarding local achievement, of enriching the opportunities provided for children, of increasing efficiency by better organization, administration and supervision, it becomes a complex problem. There is probably no "best method" which should be adopted by all states, but there are well-tested practices which have been successfully employed and have shown excellent results.

Swift states that Maryland is one of the few states of the nation that has worked out a scheme of financing public education under which burdens, revenues, and consequently educational opportunities, are equalized in a sound and relatively satisfactory way. He summarizes the Maryland system as follows:

1. The organization of schools upon the basis of the county unit.
2. Requiring from every county the submission of a budget showing cost of providing a minimum school program.
3. An assured fund from state and county sources sufficient to meet the cost of a budget submitted by the county and approved by the state.

¹⁷ *Ibid.*, p. 55

4. A state minimum salary scale graduated to professional qualifications of teachers.

5. Liberal state appropriations available to all counties regardless of wealth.

6. The apportionment of the major portion of the state school fund on the basis of school census and aggregate attendance.

7. Provision for a state equalizing fund available to every county which levies a county school tax of the minimum rate fixed by law (6.7 mills), but is unable to finance from all other state and county funds the minimum state-approved program.

8. The computation of the total county school budget on the theory that teachers' wages shall constitute 76 per cent of the total current cost.¹⁸

Under a law embodying these features Maryland distributes its state fund as shown below:¹⁹

	<i>Per Cent</i>
School census	38
Aggregate attendance	19
Enrollment	7
Per teacher	13
Equalizing grants	12
Per school officer	5
Miscellaneous	6
	<hr/> 100

This system of distributing state funds will be made clearer by a detailed statement of its application to a Maryland county.

The state superintendent of Maryland lists the advantages of the state equalization fund as follows:

1. The equalization fund enables the county to pay the minimum state salaries provided it levies a reasonable county school tax. It does this without forbidding the county to pay more than the

¹⁸ Swift, *op. cit.*, p. 286.

¹⁹ Swift, *op. cit.*, p. 287.

FINANCING OF RURAL EDUCATION

CALCULATION OF EQUALIZATION FUND FOR THE YEAR 1934-35
WORCESTER COUNTY MARYLAND²⁰

<i>Expenditures for Current Expenses</i>		<i>Appropriations</i>	
Payroll:		High School Aid	\$ 17,874.00
Supervisor	\$ 2,059.20	Textbooks and Supplies ..	3,920.88
White High Schools . .	43,895.50	Federal Vocat. Aid	914.75
White Elementary Schools	56,422.50	Census and Attendance ..	25,917.32
Colored Schools	21,672.00	Apportionment for Reduc-	
Total	\$124,049.20	tion of County Tax	
		Rate	39,328.00
* Decreases for Excess		Part-Payment of Salaries:	
Teachers:		Superintendent, $\frac{2}{3}$ }	
White High Schools . .	207.00	Supervisor, $\frac{2}{3}$ }	4,470.40
White Elementary Schools		Attend. Officer	
Colored Schools		Total from State	92,335.35
Total	\$ 207.00	From County at 47¢ on	
* Decreases for Excess		Assessment of	
Salaries:		\$20,032,744	94,153.90
** White High Schools . .	1,488.00	Total Receipts State and	
White Elementary Schools		County	186,489.25
Colored Schools			
Total	\$ 1,488.00		
Total Decrease	1,695.00		
Total Salaries	122,354.00		
\$122,354.20 ÷ 76 = .	160,992.00		
Transportation, Inc. 50%			
H. S.	26,275.55		
Vocational Teachers,			
Fed. Aid	1,759.25		
Total Vocational . . .	1,759.25		
Grand Total Required	189,027.80		
Receipts from State and			
County	186,489.25		
EQUALIZATION FUND . . .	2,538.55		

* Schools having excess teachers.

** Excludes vocational teachers shown below.

²⁰ Copy of statement of the calculation of Equalizing Fund for Worcester County, Maryland, for the school year 1934-35 by courtesy of County Superintendent, A. C. Humphreys.

minimum if it so desires by levying a tax above the required rate.

2. Counties sharing in the equalization fund can secure as many trained teachers as are available, and need not increase the local county school tax rate in order to meet the increased cost of these better teachers.

3. A minimum school year for white schools of 180 days is secured without hardship to poorer communities; and since teachers' salaries are on a yearly basis, payable in ten monthly installments, many counties have a school of 190 days or more without additional cost to the taxpayers.

4. A poor county shares in the equalization fund in direct proportion to the increases in training and efficiency of the teachers employed and the increase in high school facilities and other educational opportunities for the children, because the cost of teachers' salaries in all schools is the main factor in determining each county's share.

5. The equalization fund has made it possible to secure a salary increase for well-trained teachers, ranging from \$150 to \$700 per teacher, and totaling almost half a million dollars. Salary increases for teachers were accompanied by salary increase for county superintendents, county supervisors, and helping teachers. A supervisory officer was provided in each county for every forty teachers in the elementary schools, the state paying the entire salary of one county attendance officer and two-thirds of the minimum salaries of county superintendents, supervisors and helping teachers.²¹

Mort says of the Maryland plan, "Maryland has made great headway in the equalizing of its present minimum program, but uses a tax rate (6.7 mills) too high to bring about a complete equalization of burden."²² This author further points out that equalization plans so far devised fail to attain the desired end, except in North Carolina and Delaware, where the complete financial obligation for the minimum program is assumed by the state. He shows the inequalities that remain after the equaliz-

²¹ Swift, *op. cit.*, p. 291.

²² Mort, *op. cit.*, p. 144.

ing method has been applied in each of ten states in the table reproduced below.

TABLE VIII

*Relative Burden Required to Support the Present Minimum Program in Districts at Various Points on the Scale of Ability to Support Schools, by Selected States, 1932*²³

State	Ratio of Average Tax Rate Required to Maintain Actual Minimum Program in Districts of Varying Wealth per Classroom Unit to Rate Required in Districts of Mean Wealth per Classroom Unit, by Percentile (Districts of Mean Wealth per Classroom Unit = 1.00) *							
	3%	5%	10%	25%	50%	75%	90%	97%
Iowa	3.9	2.1	1.5	1.1	.9	.7	.6	.5
Maryland	1.7	1.9	1.4	1.8	1.2			.7
Minnesota		1.3	2.2	1.9	1.1	1.1	.9	.6
New Jersey	3.2	2.3	2.7	1.8	1.3	1.0	.8	.5
New Mexico		1.8	1.2	1.6	.9	.5	.4	.5
Ohio	2.3	2.0	1.6	1.7	1.3	.9	1.0	.8
Oklahoma	2.7	1.9	1.6	1.4	1.3	.3	.3	.3
South Carolina	3.3		1.7	.9	.8	.8	.7	.7
Utah	2.9	2.3	1.6	1.2	1.1	.8	.8	.7
Washington	2.6	1.5	2.1	1.3	1.1	.9	.7	.6

* This table should be read as follows: In Iowa a district at the 3 percentile of wealth per classroom unit (a very poor district) must levy a local tax 3.9 times as high as a district of mean wealth per classroom unit. Similarly, a district which falls at the 50 percentile (median) of districts in Iowa with respect to wealth per classroom unit has .9 times as heavy a burden as a district of mean wealth per classroom unit.

²³ Mort, *op. cit.*, p. 145.

Tennessee provided for a state equalization fund, quite similar in its general features to the Maryland system, by the action of the 1925 legislature. The minimum tax levy for participation in the equalization fund was set at 50 cents on the hundred dollars, 85 per cent of which must be expended for teachers' salaries. As a condition of receiving this equalizing aid, it was required that schools should be run for thirty-two weeks, and that teachers should be paid according to the provisions of the state salary schedule. In 1931-32 the amount paid from this fund was \$1,824,356.39 for elementary equalization as compared with a total elementary fund from the state of \$4,967,779, or 33 per cent for equalization as compared with 66 per cent on other bases. Sixty-one out of ninety-five counties participated in this fund. A very few which might have participated did not do so. In a great proportion of the non-participating counties the 5-mill tax levy provided sufficient funds to meet the state salary schedule without an apportionment from the equalization fund. During the school year of 1932-33 the total state fund for the support of elementary schools fell to \$4,367,195.24. Of this amount \$1,181,308.91 was paid as equalizing fund, making the per cent of equalization 27 per cent of the whole amount paid in salaries. This decrease in the proportionate amount of equalizing fund was due in great measure to the lowering of teachers' salaries, with consequent decrease in the funds drawn from the state by counties.

North Carolina has discarded the complex methods of distributing school funds as a means of providing equality of educational opportunity, and has gone directly at what may prove to be the heart of the equalization problem. The state has assumed full financial responsibility for a minimum school program in every district for a term of eight months. Other states should watch this experiment of North Carolina with interest.

Ohio revised its school laws in 1935 so as to provide the following school support.²⁴

I. Apportionment per pupil in average daily attendance.

1. In regular day school

Kindergarten	.... .	8½ cents
Grades 1-8	.. . . .	17 "
Grades 9-12	. . . . .	25½ "

2. Part time continuation and evening schools 20 "

II. Equalizing grants

Guarantees support of minimum school program above proceeds of a 3-mill local tax.

This program includes:

1. For schools of 180 pupils or over

Kindergarten	.. . . .	12½ cents
Elementary grades	... . . . .	25 "
High school grades	. . . . .	37½ "

2. For schools of fewer than 180 pupils, when approved as necessary by director of education and state controlling board

For each one-teacher school, \$1,150.

For each two-teacher school, \$2,400.

Transportation and tuition costs additional.

This plan provides that no local school district will need to levy more than a 3-mill tax as its share of cost, established by law, of the school program, for kindergarten, elementary and secondary grades.

It will be seen from the above statements of principles and citations of practices that the rights of the rural child and the interest of the state can be most effectively served by means of an ample state school fund, properly derived and wisely distributed. The distribution may be made on a number of bases,

²⁴ Covert, Timon—"State School Support Plans," *School Life*, Vol. 22, p. 60, October, 1936.

but a most important base, from the point of view of rural schools, is the one by means of which equalization of school opportunity and school burden may be secured.

SUMMARY

The low per capita wealth of rural sections makes necessary some method of transferring money for the support of schools from urban centers to rural regions, if a true spirit of democracy is to prevail in the United States. County and state taxes have been relied upon in the past to bring about an equalization of educational opportunities, but the concentration of wealth in industrial and commercial centers makes federal aid necessary to the poorer states.

Two major problems are involved in the financing of public education: (1) the manner of securing school funds, and (2) the method of distributing them.

Authorities quite generally agree that a property tax is not a satisfactory means of securing school funds. A tax less easily felt by those who pay it, and less easily reduced in times of economic depression, is much to be preferred. In recent years there has been a rapid change from the property tax to such forms as income, sales, severance, and inheritance taxes and various forms of privilege licenses. In 1934 state school funds not appropriated from the general fund of the state were derived as follows: from property tax in twenty-four states; from some form of sales tax in seventeen states; from income tax in twelve states; from severance taxes in eight states; from inheritance tax in three states; and from license taxes in eleven states. In some cases a state employed two or more forms of taxation for securing school funds.

State school funds should be distributed in such a manner as to achieve the following results: (a) equalize educational opportunities and burdens; (b) stimulate local effort; (c) reward good

attendance; (d) secure better teachers; (e) improve school efficiency; and (f) co-ordinate efforts. Three-fourths of the states of the union have some form of equalization fund.

A system for the distribution of school funds should make a definite apportionment upon some of the following bases: (a) school census; (b) aggregate attendance; (c) enrollment; (d) teachers employed; (e) equalization grant; (f) school officers employed; (g) enrichment of school curriculum.

CHAPTER VIII

PROVIDING AND MAINTAINING AN ADEQUATE SCHOOL PLANT

The physical equipment of the school is not an objective within itself, but a vitally important attendant condition which materially aids the educative process. Much has been made of the expression, "Mark Hopkins on one end of a log, and a boy on the other makes a good school," but a great error is made by omitting the conditions that the log must not be too long, and that it must not be either rotten or unduly knotty. It is true that in some cases the American public has seemed to forget Hopkins and the boy, and to think too much of the architectural features and cost of the building provided for their accommodation as compared with that provided in some rival town or city. This condition has been found in urban districts, however, rather than in rural communities, for it is rarely true that too much money has been expended to provide physical equipment for the benefit of rural school children. A comparison of the investment in school property per child enrolled in rural sections with that in cities, shows that rural children are either provided with too little physical equipment or that there is an excessive investment for city children. The total investment in school property per teacher employed in cities is approximately \$11,000, while in rural communities it is \$4,000.¹ By this meas-

¹ *Biennial Survey of Education, 1928-30*, U. S. Office of Education, Bulletin No. 20, 1931, Vol. II, p. 39.

ure rural schools are provided with only 36 per cent of the investment in property per teacher employed that the city schools have.

Every citizen interested in seeing rural children given a fair chance to secure the type of training which individual interests and social welfare demand they have should understand clearly the need for and advocate vigorously the providing of physical equipment that will make teaching skill and child ability effective in the highest degree. Any provision of school equipment below this level will prove a waste of money and of human values. To permit under-equipment of rural schools would be to waste power in the operation of an inadequate machine.

The five major phases of the school equipment problem are: (1) the grounds, (2) the school building, (3) the school furniture and equipment, (4) outbuildings, and (5) play equipment. Teaching equipment is not listed here, as it will be discussed under the heading of teaching efficiency. Each of these phases will be discussed in the pages that follow.

THE SCHOOL GROUNDS

The selection of the school site is a matter of great importance. Many rural schools are located on land that seems to have been selected because of its small value for any other purpose. As a result school buildings are found on steep hillsides, rocky spots unfit for cultivation and odd corners between road intersections. The general location of a school building should be determined in relation to population distribution, accessibility, and probable future needs in so far as this is possible. The specific site should be determined by a number of factors. The area available at a reasonable cost is important. For a one-teacher school one acre is often mentioned as a minimum. Certainly that should be an absolute minimum, and double that area as an optimum. Two-teacher schools should have a minimum of two acres, and three-

or more teacher schools should have from two to five acres as minimum area, depending upon the enrollment. The school grounds should be comparatively level, free from surface stone, well drained, fairly fertile as compared with farming land in the district. If possible a tract should be secured that has a few native trees of considerable size upon it, though this is less important than the other features. There should be nothing in the immediate vicinity that would be disturbing, such as a mill, barn, store, factory, railway track, or highway with heavy traffic. The best site within the area to be served should be procured, regardless of the attitude of the owner toward the sale. If a suitable tract of land is decided upon, it should be obtained at a reasonable price, even though condemnation proceedings are required to do so. The right of the children to have the best that is available transcends the right of any person to gain a profit from land by cultivating it or by holding it for increase in price.

The development and care of the school grounds is of about as much importance as the character of the ground at the outset. If native trees are on the site selected, they may in a measure determine the location of the buildings and the division of the lot. There should always be a small area at the front of the building for ornamental purposes, which, however, should not be so large as to restrict unduly the other areas, or demand an excessive amount of labor and outlay for its care. This plot should include a small grass area, perhaps a few flower beds, and some shrubs either massed in suitable places or planted along the edge of the plot. In many cases native shrubs will give a good effect and can be obtained without cost. Such a lawn will not only add beauty to the entire property and supply flowers for the school rooms, it will provide nature material, and give practical training in lawn care. Playground space and equipment is discussed on pages 135-137.

THE SCHOOL BUILDING

A school building should conform to a high standard in six major points, namely: (1) attractiveness; (2) convenient room arrangement; (3) substantial and durable construction; (4) an adequate light supply; (5) a heating and ventilating system of sufficient capacity and of approved type; and (6) an ample, sanitary, and convenient water supply. There are two distinct problems involved in constructing rural school buildings. These are the problems involved in constructing a one-teacher building and those involved in constructing a building which is to accommodate a multiple-teacher school. Since the one-teacher building may be thought of as a "minimum essential" among school plants it will be given first consideration.

The One-Teacher Building.—This type of school building should possess all six major characteristics listed above, since it is a unit plant for an educational community.

Attractiveness.—An attractive exterior is as important a feature for the one-teacher school as for any other type. That it is readily attainable is shown by the Model Rural School maintained by the Teachers College at Bowling Green, Kentucky. This is not an expensive building, but far more attractive than it would be possible to make the customary "chalk-box" type of one-teacher school. The porch is built around one corner of the building, and this gives a much better effect than one built squarely at the end or side. It is built of native stone, which imparts an appearance of dignity and permanency that would be difficult to obtain with any other material. A house of similar design built of wood or brick would be attractive if well cared for, though possibly less attractive than one of stone.

If the children of a rural community are to be limited to the service that can be rendered by one teacher instructing six, seven, or eight grades, they certainly have a right to a building

that will enable that teacher to give them the highest type of service. No school building can accomplish this end if it does

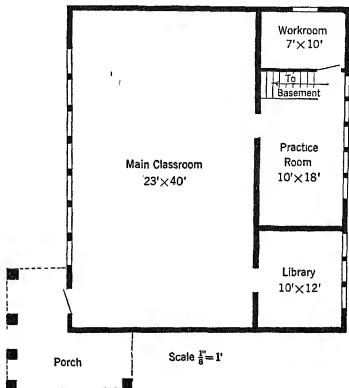


FIGURE I. PLAN A. FLOOR PLAN OF THE MODEL ONE-TEACHER RURAL SCHOOL ON THE CAMPUS OF THE WESTERN STATE TEACHERS COLLEGE, BOWLING GREEN, KY.

not combine attractive appearance with an arrangement and equipment which make possible excellent teaching and a happy school life. The school plant of any community should be as attractive and comfortable as the best home in that community,

and in many cases it should set a standard higher than is provided by any home which it serves. Its surroundings, too, should be in keeping with its general appearance, and calculated to

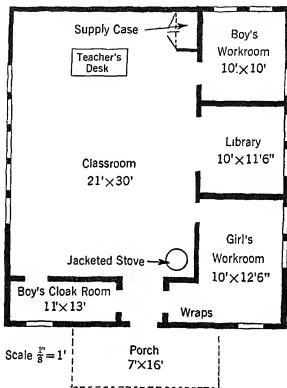


FIGURE II. PLAN B. FLOOR PLAN FOR A ONE-TEACHER SCHOOL

improve the ideals that children have established by their home in matters of sanitation, convenience, and attractiveness.

Room arrangement.—It should be borne in mind that a one-teacher school building should not be a one-room building. A

teacher skilled enough to handle all grades alone is skilled enough to occupy more than a single room with her activities. The two floor plans given below indicate what is meant by this statement. Plan A is that of the Bowling Green, Kentucky, model one-teacher school building at the Western State Teachers College. Plan B is one that was built in a poor district in western Kentucky a few years ago in a manner worthy of description. During a teachers' institute a young lady came to the instructor at an intermission and said, "I am going to build a schoolhouse in my district and I want you to give me a plan." Shortly before this the county superintendent had announced that there could be no building done during the year, but that the board would furnish building materials at the county seat for communities that were willing to build or repair at their own expense. The instructor sketched a plan on a blank page in a notebook, indicating the roof features. A few months later he received a photograph of the building, constructed according to the plans he had provided. The story was as follows: Monday morning following the institute, wagons appeared in the county seat for the materials needed to build the schoolhouse. A farmer-carpenter of the district, helped by other patrons of the school, built the house according to the plan as interpreted by the teacher. Three weeks saw the work completed and the school running in its new home. This teacher remained five years in this district, one of the poorest in the county, and for her last year of service received \$900 for an eight-month term, half of which was contributed by the citizens of the district. A traveler passing through the county two years after the house was built stopped at it to get a drink of water. He remarked later, "I did not take it for a schoolhouse but thought it the nicest little home I had seen for many miles. There were flowers and shrubs on the front lawn, shades and curtains at the windows, and an attractive, homey appearance to the whole place."

As a result of the interest aroused by the improvement of this school plant, it is said that homes were made more attractive, farms improved, and gravel roads built over the district. These results would not have followed had the schoolhouse not been a type to evoke pride of the community in itself, an appreciation for its teacher, and a satisfaction in the possession of a building far better than those of the surrounding districts. Often the beginning of a real community spirit results from such an enterprise as the above, where, for some reason, the community has produced for itself, by its own efforts, something in which it may justly take pride. The ordinary one-room schoolhouse is not calculated to develop this community pride, and as a result it is frequently an actual harm to the cause of education and co-operative effort.

The size and arrangement of a house such as described in plan B, are very satisfactory. The main room, 32 x 22 ft., meets modern standards in size and shape. It has ample length and the width is as great as can be effectively lighted from one side. The cloak rooms are sufficient in size to accommodate forty pupils. They may be entered by one door and left by the other, an arrangement which tends to avoid confusion by facilitating the movement of pupils. The three adjunct rooms, each 10 x 12 ft., are a boys' workroom, a library and reading room, and a girls' workroom. In the boys' workroom there will be, if properly equipped, a substantial work bench, a case in which to keep tools and more easily removed materials such as paints, glass, moldings, and other materials used in constructive work and school repairs. The library room will have in it the school library and a large table around which the pupils may sit to read. The girls' workroom will be equipped with a sewing machine, an oil, gas, or electric stove of small size, a cabinet for sewing materials and another for cooking utensils and a few food supplies.

With the rooms and equipment provided as described above, a really capable teacher can do excellent work. It may be objected that such a house is too expensive for a rural community to afford. The reply to this would be that this book is not written to advocate cheap schools for rural children, but good ones. If a community has a right to exist, it is the duty of society to provide a good school for the children who grow up in it. A well-trained and capable teacher can direct all the work that will be going on in the four rooms provided in this plan, and by scattering the children into groups that are carrying on different activities she can break up the deadening grind of ceaseless recitations which are the curse of many schools. Will there be noise in the boys' workroom? Of course, but it will be the noise of purposeful, worth-while effort and, therefore, not harmful to the others in the building. If the matter of cost needs further consideration, it may be said that the three adjunct rooms and their equipment would not add more than \$600 to the first cost of the building, and but little to the cost of upkeep, heating, and insurance. If 10 per cent is charged against the cost of these rooms, it will add roughly sixty dollars per year to the total cost of operation, or not more than 6 per cent of the total minimum annual cost of maintaining the school. By this improvement in equipment the efficiency of the school would probably be increased from 25 to 40 per cent. This is but another example to show that cheapness is extravagance when it comes to running schools, as well as in practically everything else in life. The standards for a one-teacher school should be set so high that wherever any form of centralization is possible, the matter of cost alone would tend to force communities to the multiple-teacher school.

Substantial construction.—The matter of substantial and durable construction needs only brief treatment. Every school building, one-teacher or larger, should be built upon a good founda-

tion and not set up on posts or pillars and left open for the winds, hogs, or dogs, to obtain free entrance beneath it. The foundation wall should be of stone, concrete, or brick, extending deep enough to be below the freezing line and high enough above the ground to insure dryness. The height above the ground is especially important in the South where termites are a serious menace to damp underframing of buildings. The walls of frame buildings should be made wind and cold resisting by sheeting and building paper beneath the weather boarding. Floors should be of good, smooth material, laid on a close sub-floor. Windows and doors should be carefully fitted into the frames so as to exclude all possible wind and prevent rattle. A house built by competent workmen, according to a correct plan, and of good material, as suggested above, will be a better investment, though of greater first cost, than one cheaply and poorly made. A good building will also have an educational value to the community such as no inferior building could have.

Lighting the rooms.—The lighting of a schoolroom is a matter of very great importance. There is no physical possession of the child more valuable than eyesight, yet it is often imperiled by the poor light provided in schoolrooms. Four chief factors determine the light available for the pupils seated in a classroom: (1) exposure and surroundings, (2) area and height of windows, (3) color of the interior of the room, and (4) width of the room. The amount of light received at different times during the day will vary. A southern exposure affords the best light, a western next; an eastern exposure gives slightly less than the western; and a northern gives least of all. Some authorities claim that a northeastern frontage for a building is best for lighting purposes but the advantages resulting from this are so small that it is probably not of sufficient importance to be made a dominating factor. Shade trees materially affect the amount of light a room receives; this is especially true of evergreens

which reduce the light during the winter when lighting is a most serious problem.

The window area should, as a rule, be approximately 20 per cent of the floor area. In the South this figure may be decreased slightly; in the North it should be increased. Shade will demand a larger per cent of window area. The height of the windows and the width of the room are also important factors in lighting. A window will not give adequate light upon a desk more than one and one-half times the height of the window from the desk. This requires that the windows reach as nearly to the ceiling as possible and not be less than $12\frac{1}{2}$ ft. high measured from the floor. The illumination decreases one-third for each four feet the top of the pupil's desk is from the window.² This means that in many cases where the window area is ample pupils in a wide room on the side away from the windows will have inadequate illumination on cloudy days. Such light deficiency does not merely cause eye-strain and general fatigue, but it slows up all forms of eye-recognition. The general acceptance of unilateral lighting has made it necessary to narrow classrooms, increase their length, and build windows almost to the ceiling.

The color of walls and ceiling also affect the light supply of a classroom. Dark walls of any color absorb light. For this reason the ceilings of classrooms should be cream, or a very light green or gray, to soften the effect and prevent too much glare. The walls may be somewhat darker, but where window area is too small, or shade about the house too dense, or cloudy days frequent, the walls should be only a little darker than the ceiling. It may be difficult and expensive to change the dimensions of a classroom or the size of the windows, but the color and tint of walls and ceiling can be changed with little cost

² Cooper, Frank D.—NEA Report on "School House Planning." February, 1925, pp. 90 ff.

or trouble. Dirt on windows often reduces illumination very materially. If the windows of many schoolrooms were thoroughly cleaned, teachers and pupils would be greatly surprised at the increased light supply.

Window shades are an important factor in controlling the light which enters the classroom. They should be neither too opaque nor too translucent, but a happy medium. Two shades should be provided for each window, mounted in the middle, so that the top one will move upward and the lower one downward. This will make it possible to cut the lower light off from the desks near the windows and allow the light from the very top to pass across the room to the dark side where it is most needed. Curtains have little effect on the lighting. They are attractive when clean, but when soiled they are not only depressing but also a menace to health. The teacher has it in her power to improve the lighting of her room by the proper adjustment of shades, and by seeing that the windows are clean enough to admit the maximum of light. The other matters mentioned which pertain to lighting must be handled by the administrative officer, the board, or the community.

Heating and ventilating.—The problem of heating and ventilating the one-teacher school is quite different from that involved in heating the multiple-room school building. In a great proportion of the one-teacher schools of the country direct-radiation stoves are still employed. This system depends upon a circulation of children rather than a circulation of air during cold weather. Those near the stove almost scorch and have to move away for protection from the heat, while those some distance from the stove have to move to it to avoid the other extreme. With little expense an ordinary stove can be jacketed so as to improve the situation greatly. The jacket may be made from ordinary galvanized iron, bent into cylindrical form, large enough to come about four inches from the stove at its nearest point.

It can be made by the local sheet-metal man or by a farmer who has the tools needed for putting on an ordinary metal roof. This method of securing a circulation of hot air from the stove is a makeshift, however, and should be used only as a last resort. There are excellent room-heaters of the convection type available at a cost that should not be prohibitive, which give better service and are more convenient than the homemade type.

The one-teacher school building should have a good basement as large as the entire building. In the basement should be located a hot-air furnace of either the pipe or the pipeless type, a fuel room, and space that can be used as bad-weather playroom. The ventilation of the one-teacher building can be improved during cold weather by means of a ventilation flue. This should be built beside the smoke flue and open into the main room at the floor level. If a ventilation flue is not provided, much good can be done by inserting a six-inch pipe into the smoke flue near the ceiling and extending it down the wall to within six inches of the floor. Fresh air may be admitted to best advantage through a pipe leading from the outside of the foundation wall to an opening beneath the jacketed stove, the warm-air room heater, or beneath the hot-air furnace in the basement. Such a fresh air pipe should be provided with a door for closing in very cold weather, or when fire is being built in the morning. If window ventilation is used during the winter, boards should be provided to insert under the lower sash so that air may come in between the two sashes. These boards should be about eight inches wide, cut in two in the center, and hinged, so that they can be inserted with ease and fitted closely against the frame at each end. If the boys' workroom is supplied with a few necessary tools, these boards and many other things of value to the school can be made by the older boys at almost no expense.

Water supply and drinking equipment.—The water supply for a rural school is a matter of vital importance. It must be abundant, constant, and pure. If in addition to these it can be free from mineral elements which give it a disagreeable taste, so much the better. No water supply should be used which is not pronounced entirely safe by the State Board of Health. The source should be a well or cistern on the school grounds, or a well or spring off the grounds from which it is piped. Wherever possible, water should be brought into the schoolroom under pressure, but this is often impracticable for small schools. In such cases it should be supplied to the children from any one of many types of bubbling fountains that are on the market. Larger schools, if unable to obtain water under pressure from a town or village system, may install their own gravity system, a hydraulic ram, or a compression pump-tank equipment. Where pressure of one of the above types cannot be obtained, a direct outdoor pressure from a pump can be provided. This type of water service is approved by the Rutherford County, Tennessee, Health Unit, and has worked well in lieu of a better one.

The Multiple-Room Rural School Building.—Much of what has been said in regard to the one-teacher building applies equally to the larger unit and does not need to be repeated. Attractive appearance, substantial construction, ample room, convenience of arrangement, adequate lighting, are of equal importance and governed by the same general principles. Room-arrangement should be planned so as to be the most convenient for moving classes into and out of the building, from room to room, and from classrooms to auditorium. The library and office should be centrally located and toilets readily accessible but isolated.

Since land is relatively cheap and abundant, the rural school should be a one-story and basement building. This will reduce cost of construction, danger from fire, insurance cost, and noise.

A satisfactory consolidated school building, accommodating 300 students, can be built for \$15,000. The floor plan of such a building is shown in Figure III. A rural school plant constructed

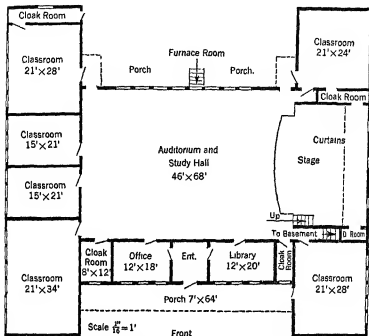


FIGURE III. FLOOR PLAN OF A CONSOLIDATED SCHOOL BUILDING, ROCKVALE, TENN.

along the general lines of the plan in Figure IV may be of almost any reasonable size without inconvenience of arrangement, or increase of cost per room. Rural school architecture should be developed along lines quite different from the general type found in cities, chiefly because ample building and playground space is available in the country at reasonable cost. This abundance of land makes possible a convenient arrangement of rooms,

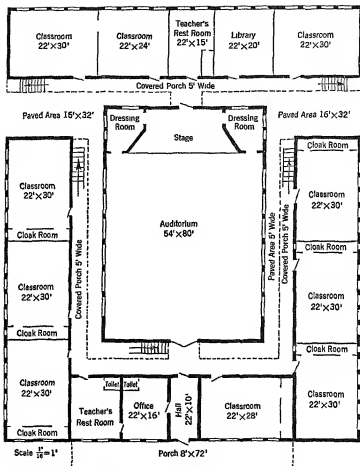


FIGURE IV. FLOOR PLAN FOR A CONSOLIDATED SCHOOL—ELEMENTARY AND HIGH SCHOOL

and provides almost unlimited possibilities in the beautification of the grounds by a well-planned planting of shrubbery and flowers. Rural schoolhouses possessing characteristics suggested above will do much to develop community pride and desirable social and individual attitudes and ideals.

FURNITURE AND EQUIPMENT

The furniture for the rural school should be as good as that found in any school. There are many points of disagreement as to just what particular type of seat and desk is most desirable, but there is no longer room for argument regarding certain essential features. The seats and desks must be single, they must be adjustable, they must be comfortable, and they must be as silent in operation as possible. When to these features is added the quality of durability, about all is said that needs to be said here.

In addition to the seats and desks for the children, there must be a good, roomy, substantial, lockable desk and a comfortable chair for the teacher. There must be cases or closets for keeping various pieces of equipment belonging to the room and the personal possessions which the teacher desires to keep in the room. There should be adequate bookcase room to care for all books and a museum case with glass doors where various articles of interest and instructional value can be kept safe. A discussion of the important matter of teaching equipment will be taken up in detail in Chapter XVI.

Pictures constitute a very important part of general room equipment. Every schoolroom should have at least one good copy of a fine picture. It may be used for direct teaching only occasionally, but if its essential features are skillfully pointed out by an appreciative teacher, its influence will be constant and helpful. In many cases pictures can be exchanged between rooms in a building and between one-teacher schools, thus pro-

viding variety. No teacher should be content until one or two good pictures hang upon the clean, appropriately colored walls that surround her children.

OUTBUILDINGS

The number of outbuildings placed upon any school ground should be kept to a minimum. If an ample basement is provided there should be none except a garage-stable for school busses and for conveyances of pupils who provide their own transportation. Toilets, fuel room, and such storage space as may be needed should be placed in the basement.

If outdoor toilets are necessary, they should be placed well back on the lot in such a position as not to interfere with play. They should be substantial, neat in appearance and conform to the best possible sanitary standards. A screen of shrubbery or vines may be provided, though vines should not be permitted to attach themselves to the buildings, nor should shrubbery be placed too close. Good walks should be built to each toilet, made of such material as would best serve to keep the school building clean. Concrete, brick, or flat stone should be used whenever possible.

In case fuel cannot be stored in the basement, a fuel house should be built near the rear of the school building, with a good connecting walk. This building, like the toilets, may be hidden by shrubbery or vines.

The garage-stable should be placed on the back line of the lot and to one corner, so as not to interfere with the play space. It should have tight, well-built doors and windows and should conform to the school building in color and other features. If horses are used, a small manure pit should be provided and cared for properly.

If a teacherage is provided it should be located on the front corner of the grounds farthest from the school building and in

line with it. It should harmonize with the school building in color and general type of architecture. Such outbuildings as are necessary should be located to its rear, as far from the school grounds as convenience will permit and screened from view by hedge or shrubbery. The cars of principal and teachers should be accommodated in the school garage and if livestock or poultry is kept by the occupant of the teacherage, provision should be made in the garage-stable for it. A driveway leading to the garage-stable should be located between the teacherage and school grounds.

In case a separate gymnasium building is desired, it should be located on an adjoining lot on the opposite side of the general grounds from the teacherage and in line with the school building. A separate gymnasium has decided advantages over the gymnasium in the school building, as it prevents the noise of gymnastic exercises interfering with class work and simplifies the problem of caring for the attendance upon athletic events, entertainments, and other affairs that are held in the gymnasium. The general layout as described is shown in the diagram, Figure V.

PLAYGROUND EQUIPMENT

Three quite definite play and recreation areas should be laid off on the school grounds, and each provided with the equipment needed to make it most effective in achieving the purpose for which it is intended.

The first of these areas is for the primary children. It should be near the school building and shaded, if possible. In it should be found sand bins, seesaws, low swings, a sliding board, and a giant stride. The second area is for the exercise and unorganized play of the older children. It should be provided with such equipment as higher swings, a high sliding board, a horizontal bar, trapeze bars and rings, horizontal and inclined ladders, and a merry-go-round. The third area should be much

the largest, and located across the rear end of the grounds. It should be given over to various types of competitive games and sports. A tennis court, croquet ground, volley-ball court, basket-

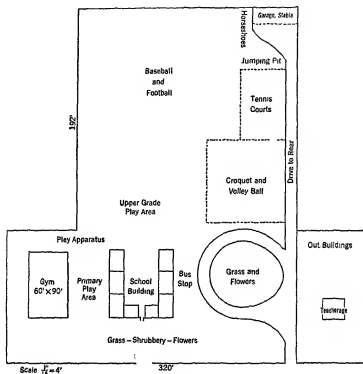


FIGURE V. PLAN OF GROUNDS FOR A CONSOLIDATED SCHOOL

ball court, horseshoe alley, jumping pit, baseball diamond, and football field are desirable so far as they are warranted by the size of the school.

The one-teacher and two-teacher schools can probably have only a few of the features suggested, but the larger schools should look forward to having many or all of them. The play

apparatus suggested above may be bought outright from a dealer who is prepared to furnish and install it, or it may be made locally and installed. If the latter method is employed the material used may be very largely of wood and rope, or if the added expense can be met, it can be made of iron pipe and chains. In most communities men will be found who will gladly do the work free. The purchase of needed materials constitutes an excellent project for a Parent-Teachers Association.

A school ground well equipped for play, games, and sports is unusual in rural communities, but it is one of those rights of rural childhood which should not be neglected. It will not only prove a great advantage to the school during its session, but if properly supervised it should make a center for social life in the community during vacation time.

In the proportion that schools are housed in good buildings, provided with adequate furnishings and equipment, both for teaching and recreational purposes, and the whole plant well cared for; in such proportion will the public interest in them and in all matters educational be increased. The physical plant is less important than the spiritual factors that make up a good school, but they are more easily seen, appreciated, and appraised by the average citizen. It is often through the care bestowed upon the physical equipment which is provided for the school that a proper community attitude is developed toward the more essential but less evident work for which the school is established. It requires a superior type of person to understand that the unseen is, in most cases, more important than the seen, the ideal more real than the real.

SUMMARY

The rural schools of the United States are provided with only 36 per cent as great an investment in physical equipment per teacher employed as are city schools. While there may not be

need for as large an investment in school plant and equipment for rural as for city schools, the discrepancy should not be so great as it is.

Five factors enter into making up the school plant. These are: grounds, school building, school furniture, outbuildings, and playground equipment.

Grounds should be ample in area, properly located, well drained, relatively level and free from obstructions, wisely laid out into lawn and play areas, judiciously planted in trees, shrubs, and flowers.

The building should possess six characteristics: attractiveness, convenience, substantial construction, proper lighting, adequate heating and ventilation, sanitary and convenient water supply. One-teacher buildings should possess all of these features and should have two or three small adjunct rooms opening off the main classroom. Multiple-teacher buildings should be arranged for convenience in moving pupils into and out of the building, and from room to room, with the least possible confusion. Auditorium, library, gymnasium, playroom, toilets, should be made as generally accessible as possible.

Furniture and equipment should include seats and desks, cases and cabinets, lockers, pictures, and window shades. All of these should be of the best type and kept in good condition.

Playground equipment should be ample to meet the needs of all children attending the school, well constructed, and kept in good repair.

Teachers should feel a responsibility for the care of property committed to them, and for stimulating the community to add to and improve such equipment as is provided.

CHAPTER IX

THE ORGANIZATION OF THE SCHOOL UNIT

The organization of the school unit upon the basis of highest efficiency and lowest cost is one of the major problems in rural education. If transportation facilities, sufficient wealth, and community interest were such as to make the proper type of consolidated school available for all country children, the problem would not be difficult. Such conditions are not found, however, in a great number of situations. With approximately 150,000 communities limited to the educational service of a one-teacher school, and many others having units where two teachers instruct all grades, it is very evident that consolidation has not as yet solved the problem and doubtless will not solve it for some time to come.

THE ONE-TEACHER SCHOOL PROBLEM

The serious educational difficulty which many rural communities face is that of making the one-teacher school an agency for giving a fair educational opportunity to a small group of rural children where a better type of school is not immediately practicable. This cannot be done in a one-teacher school at as small a per capita cost as in a school enrolling more pupils and employing two or more teachers, but it can be done and must be done if society is not going to fail in its duty to 150,000 communities having in them from four to five million children. If, however, the alternative of providing a good one-teacher school

or a school of the larger type is actually faced, the higher per capita cost of the small school will in many cases bring about its elimination.

The Type of Teacher Required.—The first requirement for the organization of a good one-teacher school is a good teacher. Such a teacher is more important for this type of school than for any other because of the greater difficulties involved and the usual absence of any effective supervision. A teacher equal to the task of making a one-teacher school really effective can be assured only when the following conditions are met:

1. A salary sufficient to attract and hold a teacher who is well qualified and willing to do the work demanded.
2. A standard of certification that will assure a thorough training on the part of every teacher employed.
3. A method of employing teachers which will rid the system of favoritism, political and personal.
4. A provision for tenure in position during successful service, in order that the teacher entering such a service may feel assured of permanent employment.
5. Such supervision as will tend to hold the teachers employed up to a high standard of efficiency.
6. A building with furnishings and equipment such as will make the best type of activity and achievement possible.

An adequately trained and experienced teacher cannot be secured in most rural communities without financial aid. A large equalizing fund will be necessary in many states to provide teachers capable of developing one-teacher schools to highest efficiency. Where there is no equalizing fund community initiative may, in some cases, provide the conditions necessary for a highly efficient one-teacher school, if the administrative organization of the school system is such as to encourage local effort.

Relieving the Congested Class Program.—The chief difficulty which the teacher of a one-room school faces is that of a crowded daily program. If the organization of the school is of the ordinary type, there will be eight, or in the South seven, grades each of which usually claims the attention of the teacher in recitation at least four times during a school day of six hours. The meeting of so many classes makes the day a continuous grind of short, ineffective "recitations" none of which provides time for worth-while achievement. Such a condition prevents effective teaching. To meet this difficulty a number of plans have been proposed by means of which the crowded program of the one-teacher school may be relieved to a certain extent. The simplest one is a narrowing of the curricular offerings to the bare skeleton of the "three R's." This is done much more frequently than is supposed, with results that are disastrous to the pupils concerned and quite certain to develop community indifference to education. Because of its utter inadequacy, such a narrowed school program will not be considered further. A number of the more or less effective methods that may be employed in bringing relief from the congested program so generally found in one-teacher schools will be presented in the pages that follow.

Correlation of subjects.—This is an old, and rather familiar means employed by many teachers and is simply the combination of related subjects in the teaching process. The various subjects of the language group—reading, spelling, writing, language, grammar—are the most easily correlated and the process is accompanied by the smallest loss in efficiency. Silent reading gives material for oral or written language; oral reading naturally grows into dramatization with its high language value; spelling is essential to written language exercises, and every written exercise should be scored on its quality of writing and carefully watched for misspelled words to add to the pupil's in-

dividual spelling list. History and geography are closely interlocking subjects and both tie up readily with civics and health. Arithmetic is an essential tool that needs to be used in connection with many other subjects. Music and art are closely connected with the language and social science groups at many points. Nature and elementary science provide motive and material for language and reading and are most vitally related to the social sciences. These illustrations show that there are many opportunities for reducing the number of recitations by a wise correlation of subjects. There is always danger, however, that a subject which is looked upon as *incidental* may become *accidental*. Unless correlation is carried to the point of interest-unit organization, which will be discussed later, it frequently results in inefficiency in the schoolroom where it is employed.

Subject alternation.—By this phrase is meant the teaching of two or more subjects at a given time on alternating days each week. For example, history may be taught three days of the week from two to two-twenty o'clock, and geography at that same time on the alternating days. Or the same result may be attained by giving one of these subjects for one month and the other for the next month, or one a certain portion of the session and the other for the remainder of the session. Some teachers prefer to alternate by topics rather than by time, that is, they complete a general topic in one of the subjects and then turn to the other subject for a topic. Such alternation does not really meet the difficulty but rather reduces the amount of each subject included in the work of the year. By the old type separate-subject method, the pupil cannot be working upon history and geography at the same time nor expend upon them the same brain energy when the time factor is reduced. He really gets three-fifths of the history that he would receive were he in a one-grade room. Subject alternation has its value, but at

best, it is like the one-teacher school itself, or the half-day session as found in some crowded city systems, a makeshift used to the detriment of the pupils.

Yearly alternation.—This method of meeting the needs of the one-teacher school is used in a number of states with fair success, but the best that can be said for it is that it gives relief for the crowded daily program, though at the same time it introduces serious instructional difficulties. It provides for the grouping of the eight grades into four classes, each class including two grades. The union of these grades into a class is always partial in the first and second grades, or "D class." It is usually partial in the "C class" which is made up of the third and fourth grades. It is quite generally made complete for the fifth-sixth and seventh-eighth grades, which constitute respectively the "B" and "A" classes. In the grades where alternation is complete, the third, fifth, and seventh grade work is given in odd years, while that of the fourth, sixth, and eighth is given in the even years. This scheme is not possible except as based upon a state course of study which clearly puts before the teacher of every one-teacher school the details of the alternation plan, with very specific instructions for carrying it out. In order that pupils may suffer to the smallest possible degree from the process of alternately skipping a grade one year and then taking the grade which should have preceded it the next year, the organization of the course of study must be carefully planned to meet the situation. As an example of course organization to meet the demands of a grade alternation program the sequence of subject matter in geography will be suggested.

The first four years should be a study of home geography, developing into a study of how people live in various parts of the world. The fifth year should be a study of North America, with emphasis upon the life and occupations of the people. The sixth year should be a study of those parts of North Amer-

ica not studied in the fifth grade, South America, and an introductory study of the life and occupations of European peoples. This work would be based upon the usual beginning text of a two or three book series with an abundant supply of supplementary reading material. During the seventh year a more intensive study of the United States should be made and the other North American countries should be taken up with emphasis upon political, industrial, economic, and civic features. During the eighth year a study of the more important countries of the Eastern Hemisphere should be carried on. The work suggested has the most desirable sequence when taken in the order given, but the sequence may be changed without serious difficulty or loss. Pupils who reach the fifth grade the year when the work of that grade is given will follow the planned sequence. Those who reach the fifth year of school when the fifth grade work is not being given will have the sequence of courses changed, but with a minimum of disadvantage. The child who is promoted from the fourth grade at a time when only sixth grade work is offered during the year following, will pass from the study of home geography and how people live in different lands, to a study of South America and European peoples. He will be in class with a group who, the previous year, had studied North America rather carefully. In consequence, he will be less adequately prepared for the work than those who progress regularly but by no means will he be unable to profit by it. The next year he will be a sixth grade student taking fifth grade work with a background of South American and European study which will probably make him a leader among the fifth grade pupils in the study of North America. The seventh year, after having studied fifth grade material as a sixth grade pupil, he will again make the long jump to eighth grade work and study the important countries of the Old World with the eighth grade group without the year of careful study of

North America that the seventh grade had made. Following this year of slight disadvantage, he will, as an eighth grade pupil, join the seventh grade class in a careful study of North America with the emphasis upon the political, industrial, and economic phases of the subject. Again, as during the sixth year when he took fifth grade work after having had sixth, he will be with a lower grade group and in all probability able to be a leader of the class.

By carefully planning the course of study, this type of arrangement can be worked out for each subject offered above the fourth grade, and for some subjects below that level. The pupil who makes the "long jumps" will have two years when he is a grade behind the work which he is taking, while during the other two years he will have the satisfaction of being a year further advanced than the other group which helps to form the class.

If it were true that a grade is usually made up of a group of children who are approximately equal in ability and previous achievement, this type of alternation would be a real hardship on the pupils, but such is not the case. Investigations have revealed the fact that only in very rare cases is a grade found which does not have pupils enrolled who are at least two years above the grade and others as far below, in both ability and previous achievement. This makes it evident that a combination of grades such as is provided by the yearly alternation plan is not impractical from the point of view of the differences in ability of those included in a two-grade class group.

In most rural schools the grades above the fourth have a very small enrollment, and consequently a combination of grades would result in a class of better size than would be provided by the single-grade class plan. To make the scheme practicable, however, it would be necessary that thorough work be done in the first four grades. Only by a thorough mastery of the essential language skills demanded for each grade can good results

be obtained from yearly alternation. As a rule, a sufficient number of combinations can be provided in the first four years to make a total of only five class groups instead of the seven or eight necessary where the alternation plan is not employed.

The daily program used with the yearly alternation method in the one-teacher schools of Kentucky is given below. The notes at the bottom show the alternation of grades. This program has six classes and does not employ yearly alternation below the fifth grade, except in first-second grade language and in third-fourth grade social science.

Directed study.—As the nature of education becomes more fully understood, there is a more general agreement on the part of high authorities that self-activity is an essential factor in the process. No longer is a teacher thought of as a “molder of the plastic clay of childhood.” She is rather one who arouses or stimulates interests, and directs activities which will result in a desirable type of learning on the part of the one taught. This conception has tended to shift the position of the teacher of the elementary school from the front of the room where she “hears lessons” to the side of the child where she skillfully directs learning processes.

As emphasis upon the direction of study as a teaching function increases, the number of classes that must be “heard” daily decreases. A number of influences have been active in bringing about these changes. The new psychological conceptions of education have, of course, been basic. The development of standardized achievement tests has had an important influence. The marked increase in the quality and quantity of well-selected and attractively presented material which is found in modern texts and supplementary reading books has tended to make study a fascinating process for children. The introduction of the contract assignment has clarified objectives and set goals of achievement in drill subjects. The employment of interest units as a

TEACHERS' DAILY SCHEDULE
One-Teacher School—Eight Grades

GRADES

Period Hour	Rec. Period	1st Grade	2nd Grade	3rd Grade	4th Grade	5th & 6th Grade	7th & 8th Grade
OPENING EXERCISES, READING, SINGING, ETC.							
8 00	10						
8 10	12	Read. & Spell.	Seat Work	Seat Work	Seat Work	Read. & Spell.	Read. & Spell.
8 20	14	Seat Work	Seat Work	Seat Work	Seat Work	Read. & Spell.	Read. & Spell.
8 30	16	Seat Work	Read. & Spell	Seat Work	Read. & Spell	Read. & Spell.	Read. & Spell.
8 40	18	Seat Work	Read. & Spell	Read. & Spell	Read. & Spell	Read. & Spell.	Read. & Spell.
8 50	20	Seat Work	Read. & Spell	Read. & Spell	Read. & Spell	Read. & Spell.	Read. & Spell.
9 00	22	Play	Play	Read. & Spell	Read. & Spell	Arithmetic	Hist. & Civics
10 00	15						
RECREATION, ETC.							
10 15	20	Seat Work	Seat Work	Read. & Spell	Read. & Spell	Arithmetic	Hist. & Civics
10 25	22	No Actvs., Etc.	Seat Work	Arithmetic	Arithmetic	Arithmetic	Hist. & Civics
10 35	24	Copying	Number & Arith.	Arithmetic	Arithmetic	Arithmetic	Hist. & Civics
10 45	26	Copying	Copying	Arithmetic	Arithmetic	Arithmetic	Hist. & Civics
10 55	28	Seat Work	Seat Work	Arithmetic	Arithmetic	Arithmetic	Hist. & Civics
11 05	30	Seat Work	Seat Work	Arithmetic	Arithmetic	Arithmetic	Hist. & Civics
11 15	32	Play	Play	Writing or Draw.	Writing or Draw.	Writing or Draw.	Writing or Draw.
11 45	35						
12 00	40						
NOON—LUNCH, DRESSING, RECREATION, ETC.							
1 00	12	Copying	Copying	Arithmetic	Arithmetic	Hist. & Civics	Arithmetic
1 10	14	Lat. & Civics	Lat. & Civics	Arithmetic	Arithmetic	Hist. & Civics	Arithmetic
1 20	16	Seat Work	Seat Work	Arithmetic	Arithmetic	Hist. & Civics	Arithmetic
1 30	18	Seat Work	Seat Work	Arithmetic	Arithmetic	Hist. & Civics	Arithmetic
1 40	20	Play	Play	Arithmetic	Arithmetic	Hist. & Civics	Arithmetic
2 10	25						
2 25	12						
2 35	15	Read.—Correl. Work	Read. & Spell	Lat. & Civics	Lat. & Civics	Language	Language
2 50	18	Read.—Correl. Work	Read. & Spell	Lat. & Civics	Lat. & Civics	Language	Language
3 07	15	Seat Work	Seat Work	Hist. & Civics	Hist. & Civics	Language	Language
3 20	17	Dismiss	Dismiss	Hist. & Civics	Hist. & Civics	Geog. or Health	Geography
3 30	18						

Notes: Subjects in black-face type denote recitation work. In odd years, 5th and 7th grade work is given to the two upper classes. In even years, 6th and 8th grade work is given to these classes.

basis for the organization of subject matter has opened up a new road for learning in the lower grades.

A few years ago the late U. J. Hoffman, then rural supervisor for the state of Illinois, introduced a supervised study program for the one-teacher schools of that state which has proven very valuable as a means of increasing the effectiveness of such schools. The plan is given below with the explanatory notes that are provided in the bulletin from which the program is taken.

PROGRAM FOR A ONE-TEACHER SCHOOL¹

First Session—8:45 to 10:40

<i>Begin</i>	<i>Time</i>	<i>Subjects</i>	<i>Classes</i>	<i>Instruction—Class or Directed Study</i>
8:45	15			Greeting pupils.
9:00	10	General Exercises	All	Singing, story telling, reading, current events, nature study, etc.
9:10	20	Reading	(5-6) (7-8)	Directed study to the class that will not have class at 10 o'clock.
9:30	30	Reading	1, 2, 3, 4	1, 2 class instruction daily 3, 4 class or directed study as desired.
10:00	15	Reading	(5-6) (7-8)	Class instruction to those that did not receive directed study at 9:10
10:15	15	Writing and Spelling	All	Class instruction in each subject on alternate days.
10:30	10	Rest	All	Physical training and games.

General Exercises: For 10 minutes beginning at 9:00 o'clock any general exercise may be engaged in, the purpose being to start the

¹ Simpson, T. A., Watts, C. H., and Miller, J. E. W.—*The Rural One-Teacher Schools of Illinois*. Circular No. 263. Springfield: Illinois State Department of Education, 1932, pp. 79-88.

day pleasantly. Every pupil should be put to work before the teacher begins instruction.

Reading: For 20 minutes from 9:10 is the period for giving individual instruction to two reading classes. The fifth and sixth grades are combined as are also the seventh and eighth. One or both of these may receive the teacher's help. She may do for each member what is needed most.

For 30 minutes from 9:30 the primary grades, each grade separately, receives class instruction daily. The third and fourth grades may be combined and receive class or individual instruction as desired.

For 15 minutes from 10:00 either of the classes (5-6) or (7-8) which did not receive individual instruction at 9:10 may receive class instruction. If both classes received individual instruction at 9:10 the 15 minutes may be apportioned to other classes. If both classes require class instruction, one can have it at 9:10.

For 15 minutes from 10:15 all the school may receive instruction in *writing* one day and *spelling* the next.

The study of these subjects, reading and spelling, is done during this session.

The pupil's study is not interrupted by leaving off to go to class and then to resume the interrupted study. Some resume the study after class instruction but that is not an interruption of study. The teacher's mind is adjusted to teaching reading and does not need to shift from one subject to another.

From 10:30 to 10:40 is the time for physical training and games. The teacher should as much as possible see to it that all are engaged in wholesome play.

Third and fourth grade classes in reading can usually be combined. It is not always advisable. In arithmetic no classes should be combined.

Arithmetic: For 20 minutes from 10:40 to 11:00 the teacher should get the whole school started to work and give individual instruction to as many of the four arithmetic classes as can be best served in this way. The classes are the 5th, 6th, 7th, and 8th grades.

For 30 minutes from 11:00 to 11:30 the first and second grades

should have reading or number work as may seem best. The third and fourth grades should have class instruction and drill daily. But sometimes the pupils in the third and fourth grades can be served best by individual direction in doing exercises. Then their class time should be devoted to directed study instead of class instruction.

For 30 minutes from 11:30 to 12:00 the classes which did not receive individual instruction at 10:40, should now be given class in-

Second Session—10:40 to 12:45

<i>Begin</i>	<i>Time</i>	<i>Subjects</i>	<i>Classes</i>	<i>Instruction—Class or Directed Study</i>
10:40	20	Arithmetic	5, 6, 7, 8	Directed study to those that will not have class at 11:30.
11:00	30	Reading and Arithmetic	1, 2, 3, 4	1-2 reading and numbers as desired. 3-4 class or directed study as desired.
11:30	30	Arithmetic	5, 6, 7, 8	Class instruction to those that did not have directed study at 10:40
12:00	45	Noon Intermission	All	Lunch and organized play.

struction. But if they can best be served by individual instruction this time can be given to it.

From 12:00 to 12:45 is the time for lunch and organized play. The pupils should eat their lunches at their desks. In winter a hot dish should be served; they should not be allowed to eat their lunch anywhere and in any way. There is no objection to talking, and sufficient time should be taken to avoid bolting the food. All should remain seated until dismissal.

The major study is language, the minor, physiology and civics. The latter should come on alternate days or a half year may be given to each. The fifth and sixth grades do not have what may be called grammar. They have language studies which lay the foundation for technical grammar in the next grades. Exercise or workbooks should be used as well as a text in language.

From 12:45 to 1:05 the whole school can be started in the work of the session. Either individual or class instruction may be given to some at 12:45, to others at 1:30.

In language there is more occasion for class instruction than in any of the other studies. Only when exercises are to be done is in-

Third Session—12:45 to 2:40

<i>Begin</i>	<i>Time</i>	<i>Subjects</i>	<i>Classes</i>	<i>Instruction—Class or Directed Study</i>
12:45	20	Grammar	5, 6, 7, 8	Directed study to those that will not have class at 1:30
1:05	10	Reading and Language	1, 2	1 reading daily. 2 reading and language on alternate days.
1:15	15	Language	3, 4	3, 4 may be combined. If not combined give directed study to each on alternate days
1:30	30	Language and Grammar	5, 6, 7, 8	Class instruction to those that did not have directed study at 12:45.
2:00	30	Physiology and Civics	(5-6) (7-8)	A half year in each or on alternate days. Class or directed study as desired.
2:30	10	Rest	All	Physical training and games.

dividual instruction feasible. The study is foreign to anything that the pupils have done. The abstract thinking they must do is difficult. Much explanation and illustration are necessary. Class instruction must come often.

From 1:05 to 1:15 the primary grades should have reading and such language instruction as is suitable.

From 1:15 to 1:30 the third and fourth grades receive class instruction daily. Courses of study usually provide that these classes be combined and do the work of each grade in alternate years. If this is not feasible, the lessons can be so assigned that class instruction is given on alternate days. The class which does not receive

class instruction should be given written exercises in language work-books for that day, the teacher taking time only to inspect the work at the close to see that it has been done.

From 1:30 to 2:00, class or individual instruction is given to the classes which were not served at 12:45. The 30 minutes devoted to the four classes may be apportioned as the circumstances may require.

From 2:00 to 2:30 the fifth and sixth grades should have physiology together for a year on alternate days. On days when they do not have class instruction, they should prepare the work for the next day. For half a year the seventh and eighth grades have physiology on the days when the fifth-sixth do not have class. This provides for one class daily. Some of the time can be used to give needed class or individual direction to those that do not meet the teacher in class. This period can be used either for class or individual instruction as seems best.

From 2:30 to 2:40 is the rest and play period.

Fourth Session—2:40 to 4:00

<i>Begin</i>	<i>Time</i>	<i>Subjects</i>	<i>Classes</i>	<i>Instruction—Class or Directed Study</i>
2:40	20	Construction and Nature Study	(1-2) (3-4)	1, 2 construction work daily. 3, 4 nature study daily
3:00	30	History	(5-6) (7-8)	Classes to be combined. Have class or directed study as desired
3:30	30	Geography	(5-6) (7-8)	Classes can be advantageously combined. Have class or directed study as desired
4:00		Dismissal		

In the last afternoon session time is not specifically assigned for directed study and individual instruction. A part or all of the class period may be used for the class or directed study as will best serve the needs of the pupils.

The fifth and sixth grades should be combined in both elementary

geography and history. The courses should be so arranged that they can be alternated. This is also true of the courses in the seventh and eighth grades.

These courses require more reading than can be done in this session. Time for doing this reading can be found in the first session when forty-five minutes are devoted to reading. These classes can use part of that time for reading books, or articles in cyclopedias, bearing on their geography and history lesson. The fourth session can be used to study the text, drawing maps and diagrams and preparing notes and topics necessary to master the lessons.

From 2.40 to 3:00 the first and second grades can do construction work or drawing or whatever seems best for them. They may be sent out to play at the end of this period. The third and fourth grades have nature study. This is preparatory to geography. The time can be divided as suits the purpose best. In courses of study it is also called oral geography. Alternation can be practiced in this study.

From 3:00 to 3:30 two history classes receive either individual or class instruction as may seem of greatest advantage to the pupils.

From 3:30 to 4:00 two geography classes receive class or individual instruction as the teacher deems best.

Interest unit organization.—A very effective means of making the one-teacher school an efficient agency for educating children of a rural community is by the employment of the interest unit for organizing the subject matter presented, combined with some plan for securing a desirable level of achievement in the tool subject.

The term, interest unit, is applied to the type of school activity in which a variety of related experiences, drawn from a number of general fields of knowledge, are organized about a unifying center of interest that appeals to the members of a class. The work of a teacher who employs this method becomes very largely that of directing study and related learning activities rather than the formal hearing of lessons. Because of the wide range of

interests involved, it is possible to combine a number of grades in working out a unit, and in that way meet the needs of the multiple-grade room. Such a unit will usually include a number of subordinate topics that will constitute projects or problems, and the whole will have many of the characteristics of a "type study" as that form of unit was developed by Dr. Charles A. McMurry.² Two things are necessary for the success of this type of teaching in a one-teacher school: a thoroughly trained teacher, and an ample and well-selected library. A well-trained supervisor would aid in systematizing and co-ordinating unit teaching, and a good state course of study, dealing specifically with this form of subject-matter organization, would be of inestimable worth. A good teacher, however, who possesses faith in herself and has initiative can achieve success in this type of work without such aids. To bring out clearly the characteristics of such a unit, outlines for two are given below.

The first illustrative unit to be presented will be one dealing with wheat. The study of this unit may be carried on by pupils of from one to four grades. The fifth, sixth, seventh, and eighth grades may work together very effectively as a single work-group. In an agricultural community where wheat is raised, the study should start with the local wheat fields, and be carried through all the processes involved from the breaking of the soil to the consumption of the crop as human food in its various forms. The main topics as suggested below will fit any community or school. The time devoted to the study will vary according to the thoroughness and detail with which it is made, but should probably take as much as six weeks.

² *How to Organize the Curriculum*. New York: The Macmillan Company, 1923, Chaps. IV, V, VI, VII.

STUDY OUTLINE FOR AN INTEREST UNIT ON WHEAT

I. Growing Wheat in Our Community

1. Factors which make this a wheat-growing region:
 - a. Topography.
 - b. Character of soil.
 - c. Climate.
2. Preparation of the soil:
 - a. Breaking: tools used, depth broken, power used.
 - b. Pulverization: tools used, purpose, value.
 - c. Fertilization: manure, how applied, amount; commercial fertilizers, kind and cost, amount, how applied; soil-improving crops.
3. Selection and sowing of seed:
 - a. Season.
 - b. Variety and amount of seed used.
 - c. Machinery used.
4. Growth of the crop:
 - a. Winter growth: effect of snow and freezing.
 - b. Spring growth: stooling, development of stalk and head.
 - c. Insect enemies and diseases of wheat.
5. Harvesting:
 - a. Time.
 - b. Method and machinery used.
6. Threshing and storing:
 - a. Time.
 - b. Machinery used and by whom.
 - c. Place and method of storing.
7. Marketing:
 - a. General market: how transported, where sold, how stored, ultimate destination.
 - b. Home and local consumption: local mills, capacity, kinds, custom grinding, grinding for local markets.

II. Wheat Growing in Other Parts of Our Country

1. Chief wheat regions of our country: location, topography, soil, climate.
2. Growing the wheat: time of sowing, harvesting, threshing, marketing.
3. Wheat marketing and milling centers and transportation routes.
4. Wheat products: bread, crackers, cereals and other foods.
5. Life in the wheat regions of our country.

III. Wheat Growing in Other Parts of the World

1. Canada.
2. Argentina and other parts of South America.
3. England and Western Europe.
4. Eastern and Southeastern Europe.
5. Asiatic countries.
6. Australia.
7. Africa.

Study the peculiarities in producing methods in each country, the soil and climate that make wheat-growing profitable, marketing centers, transportation to other markets, and farming methods.

In communities where wheat is not grown, the study may start with topic 4 in part II of the outline and run back over all of the topics except topic 1 of part I. As a substitute for this the question, "Why does our community not raise wheat?" should be discussed.

The approach to the study of wheat through the wheat products used in the homes of the pupils is usually a most effective one to use in schools located in non-wheat-producing regions. By this approach intimate contacts with wheat as a food are made, and as the various wheat foods are studied the story will run back through the bakery or cereal food factory to mills,

storage elevators, transportation routes, grain-buying centers, local markets, and finally to the wheat fields, the point where the children from wheat-growing regions started.

When used with either two or four grades combined into a class, this study can be repeated in alternate years. Pupils who take the study during the fifth or sixth grade can repeat it with profit two years later as seventh or eighth grade pupils. Each pupil should carry on the type of work that appeals most strongly to his or her interests and ability, and if taken a second time a new phase of the unit should be selected. In that way the repetition of the unit will be of definite value rather than objectionable. As much interest will probably be developed by pupils during the second study as was developed during the first, when the work was done on a lower level and with a more limited background. A fine history content may be brought into the unit by extending into the past such topics as methods of breaking and pulverizing the soil, harvesting, seeding, threshing, and processing grains for use as food.

The two chief difficulties involved in this type of instruction—the training of the teacher, and the supply of reading material for the use of the children—can be overcome by adequate salaries and higher qualifications for teachers, and by state or county funds for school libraries, to be available only for those schools that buy approved books, directly related to teaching units. Much free reading material may also be obtained. While studying wheat according to the plan suggested, use may be made of federal and state bulletins, agricultural papers, and advertising materials. Pupils may also interview persons in the community who have special information on the subject, such as millers, farmers, threshers, county farm agents, bakers, and merchants. Texts in geography have much material on the subject that can be found by reference to the index, and encyclopedias of the simpler kind will prove valuable. In this connection it should

be pointed out that if the course of study for geography corresponds to the statement given on page 143, the fifth grade children should study with special care the wheat regions of North America, wheat transportation routes, and market cities. The sixth grade class should be responsible for information in regard to the wheat-producing regions of South America and Western Europe, with emphasis upon climatic and soil features, transportation facilities, and marketing centers. The seventh grade should give special attention to the details of production, transportation, manufacture, and ultimate consumption. The eighth grade should give their time largely to the Eastern European, Asiatic, African, and Australian wheat regions, and to the world markets and transportation methods and routes. In this way each grade will study the geography for which it is held responsible by the course of study while all are engaged in the study of a world-wide and age-old product of the soil that has profoundly affected the development of civilization.

If time permits, the wheat unit may be extended by changing its title to *Wheat and Its Kin*, thereby including rye, barley, oats, and rice. It may be enlarged by including the study of the wheat plant from the botanical or nature point of view. There is abundant opportunity, also, for constructive projects such as constructing a model of a flail, a threshing machine, a burr mill, a roller mill, a binder, a grain elevator.

In addition to the geographical content which is learned during the study of the wheat unit, much other formal subject matter of the traditional course will be acquired. Valuable contributions will be made to the history for each grade; an abundance of motivated silent reading, and some oral reading will be required; excellent oral English training will be demanded in reporting to the class the information which individual pupils may discover; training in the use of the index,

dictionary, and encyclopedia will come as a result of the motivation of need. Spelling, writing, and structural language exercises will be provided in abundance. Many arithmetic problems of considerable variety, suited to the various grades participating, will be natural outcomes of the work. The older pupils should find in part I, topics 1 to 3 a motive for studying the breeding of wheat, and in topic 4 a study of wheat diseases and insect enemies will lead into a type of nature work that is both interesting and profitable.

Other subjects, similar to the one outlined and suggested above, may be worked out with equally good results. In many sections corn will provide a good unit to use in yearly alternation with wheat. Cotton as a unit subject is rich in possibilities. Sugar, coming as it does from the beets of the North Temperate Zone and from the sugar cane of the tropical and semi-tropical regions, opens up a wide field for study. Livestock and poultry have great possibilities as unit subjects. Wool and silk, also, either separately or associated with the study of cotton constitute an excellent unit.

Another series of subjects, equally available for one-teacher schools, includes transportation, communication, manufacturing, mining, forests, and fishing. An outline for a study of transportation, similar to that for the study of wheat, is given below. Two to four grades may be combined in the development of this interest unit.

STUDY OUTLINE FOR AN INTEREST UNIT ON TRANSPORTATION

I. Local Transportation Facilities

1. Railway transportation:

- a. Name, extent, terminals, and connections of local roads.
- b. History of the roads: when built, for what purpose,

- extensions and developments, present condition of tracks, equipment, business.
- c. Track, right of way, rolling stock, including locomotives and cars, safety equipment, shops, management.
- d. Train service:
 - (1) Passenger: through trains, equipment, schedule and connections; local trains, schedule and service rendered; time tables, rates.
 - (2) Freight service: through trains, number, schedule, chief freight hauled; local trains, number, schedule, run, chief service rendered.
- e. General history of railway development:
 - (1) The development of the locomotive: changes in size, driving wheels, weight, power, general appearance.
 - (2) The development of freight cars: carrying capacity, construction, brakes, couplings, refrigerating devices.
 - (3) The development of passenger cars, sleeping cars, dining cars.
- 2. Highways and highway transportation:
 - a. State and federal highways serving the community.
 - (1) Names, numbers, connections, types of construction, cost per mile, maintenance; how funds are obtained to build and maintain.
 - (2) Bus transportation: Lines which serve the community, schedule and connections; construction and capacity of busses; bus contribution to road upkeep.
 - (3) Truck service; truck lines; independent trucks; size, capacity, construction of trucks; through and local trucks; speed of trucks.
 - b. Local roads: kinds, how built and maintained, use.
- 3. Air transportation: outline about as for other agencies, if

there are air lines near enough to be known by the children. If not, give smaller emphasis.

4. Water transportation: same suggestion as for air transportation.
5. Transportation in the past and in other lands today.

This unit offers many opportunities for personal investigation and constructive activities. A fair amount of reading material is available, such as railway guides, booklets, and pictures; bus advertising material; steamship advertising booklets; in addition to histories and geographies which will contain more or less material on the subject. Topic 5 in the above outline gives a rich field for both geographical and historical study, and may be used as a unit within itself in years when the unit outlined is not given. Trips to railway yards or local sidings for investigation of freight and passenger cars, locomotives, tracks, signal systems, switches, the handling of trains by telegraphic or telephonic orders, are very profitable for the entire school if they can be arranged. Otherwise, individual groups can make such trips and report results. Federal, state, and local highways, and their traffic can be studied first-hand to advantage. These studies will furnish valuable material in developing an understanding of civic and political relations. As suggested for the wheat unit, each grade, co-operating in the study of the unit, should seek to find connections between the phases of the study and the phases of geography and history being studied in the regular text. A wealth of oral and written language will be involved in discussions and reports. Booklets may be constructed involving drawing, cover designing, illustrating, and careful writing of descriptive matter.

Since this is not a book of methods in teaching, the reader is left to pursue the subject further by reference to the abundant material to be found in recent books and magazine articles.

The suggestions that have been given are included merely to show the possibilities that lie in these large units of subject matter. Appealing as they are to children, they constitute an effective means of instruction in the one-room rural school where children of widely varying abilities must be grouped together for instruction. They serve, also, if wisely developed, to make of the teacher in a one-room school what every elementary teacher should be, an awakener of interests, and a director of study in the broadest acceptance of the term. Unit teaching makes it possible for one teacher to direct the work of six or eight grades effectively in a single room. She cannot do this as a "hearer of lessons."

SUMMARY

The most difficult task involved in the organization of school units is that of making the one-teacher school an effective educational agency. These schools exist in such numbers that making them efficient constitutes a major task of educational leadership.

A superior teacher is more important to the success of the one-teacher school than any other, because the tasks faced are more difficult and aid is less available.

The congested daily program is the most serious problem. Four aids in solving this problem are: correlation of subjects, subject alternation, grade alternation, and unit organization. The first three are unsatisfactory. The best solution is to be found in the unit organization of subject matter and the substitution of supervised study for class recitations in large measure. The program proposed by Supervisor Hoffman, of Illinois, a few years ago uses supervised study without the unit organization. Combined with the unit organization it is more effective.

Interest units make it possible for children widely differing in school advancement to work together effectively upon different phases of a common problem that appeals to a wide range of

interests and is within the ability of pupils of a number of different grades.

The teacher who is sufficiently skilled to carry on a series of wisely selected units of study throughout a year, to supplement them with necessary subject matter and drill, and to test advancement by means of standardized achievement tests, can do superior teaching in a one-teacher school.

CHAPTER X

THE ORGANIZATION OF MULTIPLE-TEACHER RURAL SCHOOL UNITS

The multiple-teacher school is sometimes a definitely planned unit, though more frequently than not it is due merely to an increase in school population beyond what one teacher can care for. The smallest member of this group, the two-teacher school, is little better than the one-teacher school so far as the training of teachers, salary of teachers, and length of term are concerned, but the larger units show a marked advance. Table IX shows these factors for the school year of 1929-30.

The table below shows that there is very little difference between the median salary, training, and experience of the teacher of one-teacher schools and those of two-teacher schools. The experience and length of term, however, is considerably longer for the teachers employed in the three-or-more teacher, country and village schools. The salary increases for the larger type of school indicate that there is a definite plan to improve these schools on the part of administrators. The fact that the experience of the teachers in consolidated schools is markedly less than that of the larger non-consolidated schools of the open country and village, requires interpretation for which there are no definite data. It probably indicates that the consolidated schools are tending to secure the services of teachers of higher training but more limited experience. It may also indicate a tendency on the part of this type of teacher to make rapid advancement into the

schools of rural towns, and cities. The difference in experience of the teachers in one-teacher and two-teacher schools does not correspond with the salary paid, as would be expected. This is probably the effect of the easier task of the teacher who teaches

TABLE IX

*Comparative Training of Teachers, Salaries, and Length of School Term in Five Types of Schools for the School Year of 1929-30. White Teachers Only*¹

	<i>Training of Teachers Beyond High School</i>	<i>Median Salary of Teachers</i>	<i>Average Length of School Term, Days</i>	<i>Median Experience of Teachers</i>
One-Teacher Schools	0 yrs., 2 mo	\$ 883	162	2 yrs., 6 mo
Two-Teacher Schools	0 yrs., 5 mo	881	156	3 yrs., 7 mo.
Three-or-more Teacher Schools, Country	1 yr., 0 mo.	1,022	163	4 yrs., 2 mo.
Consolidated Schools, Country	1 yr., 6 mo.	1,060	168	3 yrs., 8 mo.
Three-or-more Teacher Schools, Village	1 yr., 6 mo.	1,174	174	4 yrs., 2 mo.

fewer grades as compared with the one who teaches all grades.

Retardation and elimination figures are fairly good indexes of school efficiency. The Tennessee State Reports give grade-enrollments and age-grade tables for the types of schools under consideration. These show 47 per cent of retarded pupils in the one-teacher schools, 44 per cent in the two-teacher schools, 36 per cent in the three-or-more teacher rural schools, which include village and consolidated schools, and 26 per cent in city schools. These figures are for white schools only. This places the two-

¹ Gaumnitz, W. H.—*The Status of Teachers and Principals Employed in the Rural Schools of the United States.*

teacher school only 3 per cent better than the one-teacher school in pupil progress, 8 per cent poorer than the village and consolidated schools, and 28 per cent below the city school. The elimination figures for the different types of rural schools in Tennessee are also worthy of consideration.

TABLE X

*Elimination of Pupils from Three Types of Rural Schools for White Schools, 1934-35, City for Comparison*²

Type of School	Per Cent of Students Held Each Year						
	2nd	3rd	4th	5th	6th	7th	8th
One-Teacher	67	73	66	53	45	35	30
Two-Teacher	70	73	70	61	52	44	42
Three-or-more Teacher	81	83	79	71	63	58	52
City Schools	90	89	88	84	77	72	67

This table indicates that the two-teacher school has little better holding power than the one-teacher school until the seventh grade is reached. In the seventh grade it exceeds the one-teacher school by 9 per cent in its holding power, and in the eighth grade by 12 per cent. It is 14 per cent below the larger rural schools in this characteristic for the seventh grade and 10 per cent below them for the eighth grade. The larger rural schools are 14 per cent below the city schools in holding power for the seventh grade and 15 per cent below for the eighth grade.

If the 13,492 pupils who entered the one-teacher schools of Tennessee for the year in question had been given the opportu-

² Annual Report of Department of Education, State of Tennessee, 1935, pp. 64-71 and 82.

nity to attend a two-teacher school, 1,619 more future citizens of the state would have reached the eighth grade level of training. If these children had been given the privilege of attending a three-or-more teacher school, 3,103 more of them would have attained that amount of training for citizenship. If Tennessee had given each of its children enrolled in a one-teacher or a two-teacher school the chance to attend a three-or-more teacher school, 7,727 more of its future citizens would have obtained an eighth grade training. If all of the rural schools of the state possessed a holding power as good as that of the city schools, it would mean a total of *13,437 additional children each year brought to the level of eighth grade training.*

THE TWO-TEACHER SCHOOL

The organization of the two-teacher school is much simpler than that of the one-teacher unit, though presenting many of the same difficulties. It may care for eight, seven, or six grades. With eight grades there should be three grades in the lower room and five in the upper. Where there are only seven years to the elementary school the division will naturally give three and four grades to the respective rooms. In the six-grade elementary school the rooms should care for two and four grades or three each, depending upon the enrollment. In Tennessee there were enrolled for the school year of 1932-33, 47,626 pupils in the first three grades of the two-teacher schools and 41,652 in the five upper grades. This proportion seems to be fairly constant from year to year in this type of rural school for that state. The average enrollment in the two-teacher schools was sixty-five, of which thirty-five were in the first three grades. The thirty pupils enrolled in the five upper grades were distributed about as follows: fourth grade, eight; fifth grade, six; sixth grade, six; seventh grade, five; eighth grade, five. These

averages for the enrollment by school and by grades for Tennessee are probably fairly typical of similar schools in other rural states. The three primary grades, under the instruction of one teacher, can usually be organized effectively without alternation, either by subjects or years. The five upper grades in the eight-year system may be organized with the fourth grade as a single unit, employing yearly alternation for the fifth-sixth and seventh-eighth grades. In the seven-year elementary schools, the fourth-fifth and sixth-seventh may be alternated. It would seem, however, that relief from class congestion in this type of school might better be secured by employing the interest unit and the directed study plan as suggested for the one-teacher school. This would provide two groups: fourth and fifth grades with fourteen pupils, and sixth, seventh, and eighth, with fifteen pupils. Group unit work for the content subjects, and individual instruction and special drill groups for the tool subjects would meet the requirements of these grades in a satisfactory manner.

Light is thrown upon the question as to the relative efficiency of the one-teacher, the two-teacher, and the three-or-more teacher school by a study recently completed in Tennessee. Achievement tests were given to 7,287 white children of the fourth, fifth, sixth, seventh, and eighth grades of the three types of schools. Commenting upon the results of these tests the report says, "The pupils from the one-teacher schools reached the standard normally expected in only two cases in the fifty-five points of measurements in grades four to eight, inclusive; the two-teacher school pupils reached the standard in seven cases; the three-or-more teacher school pupils reached the standard in twenty-six cases."⁸ The facts ascertained by the study are shown in greater detail in Table XI. This is a reproduction of seven out of the eleven columns of an unpublished table.

An examination of Table XI shows that the two-teacher school

⁸ Report of Tennessee Educational Commission, 1934, pp. 56-59.

TABLE XI

*Norms for Various Subjects, Grades Four to Eight Inclusive, and Scores Made by Each Grade in the Three Types of Schools **

Subjects		Reading	Geography	History	Arithmetic Problems	Arithmetic Fundamental Operations	Spelling	English Usage
Grade	Norm	58.5	57.0	57.0	58.0	58.0	58.0	58.5
4th Grade	1-Tchr. Sch.	47.5	53.5	43.8	55.7	55.2	62.7	58.4
	2-Tchr. Sch.	55.7	*52.5	44.8	58.8	58.1	*62.6	59.0
	3-or-more Tchr. Sch.	61.6	59.5	44.8	60.0	58.5	63.7	61.4
Grade	Norm	68.0	69.5	69.5	70.0	67.0	67.0	64.5
5th Grade	1-Tchr. Sch.	62.3	57.5	52.9	66.6	55.2	64.3	64.0
	2-Tchr. Sch.	*61.3	60.3	*51.1	68.4	57.2	65.3	*63.0
	3-or-more Tchr. Sch.	68.8	67.8	66.0	70.3	59.4	71.2	64.6
Grade	Norm	72.5	76.5	76.0	78.0	73.0	77.0	68.0
6th Grade	1-Tchr. Sch.	65.6	65.3	65.3	69.1	58.9	73.6	65.0
	2-Tchr. Sch.	70.4	67.1	71.2	75.4	67.6	75.2	65.6
	3-or-more Tchr. Sch.	74.8	72.4	78.3	77.6	67.0	79.0	67.8
Grade	Norm	76.5	82.0	87.0	92.0	70.5	90.0	74.5
7th Grade	1-Tchr. Sch.	71.6	71.1	77.8	79.2	60.3	82.2	66.5
	2-Tchr. Sch.	*70.7	71.6	*77.1	*79.1	62.8	84.2	*66.4
	3-or-more Tchr. Sch.	75.4	78.4	87.7	83.2	68.9	87.4	70.4
Grade	Norm	80.5	85.0	94.0	98.0	85.5	98.0	78.4
8th Grade	1-Tchr. Sch.	73.8	77.9	83.3	88.9	70.2	87.1	70.0
	2-Tchr. Sch.	*73.5	*72.6	*82.5	*81.1	*66.5	*85.3	*69.6
	3-or-more Tchr. Sch.	80.4	81.0	90.7	91.4	74.2	92.8	75.8

* Cases where the two-teacher school pupils are lower in score than the pupils from one-teacher schools

¹ Unpublished data obtained by the Tennessee State Educational Commission, 1934.

pupils excel those from the one-teacher schools in only 19 cases out of 35, and are excelled by them in 15 cases. The differences in scores are often slight. The scores of the two-teacher school pupils have a total excess of 29.3 points or an average of only .8 points over those of the one-teacher schools. The pupils from the three-or-more teacher schools, on the other hand, excel the pupils of both of the other types by a total of 169 points, or an average of 4.8 points. This is six times the average amount by which the scores of the two-teacher school pupils excel the scores of pupils from the one-teacher schools. In only one case—in sixth grade arithmetic fundamentals—do the pupils of the smaller schools excel those of the larger, and that by a difference in score of only .6 point. In fourth grade history the scores of the pupils from the large school and the two-teacher school are equal. The facts seem to substantiate the view that the two-teacher school is only a very little more efficient than is the one-teacher school.

THE LARGE-UNIT RURAL SCHOOL

The term used above applies to a variety of types of rural schools, differing in many features of organization and control, but having the common characteristic of employing more than two teachers who work together as members of an instructional unit. The more common types are:

1. The elementary school of six, seven, or eight grades.
2. The seven or eight elementary grades and two years of the standard four-year high school.
3. The seven or eight elementary grades and four years of standard high school.
4. A six-year elementary school and three years of junior high school.

There is usually in this unit a principal who has administrative control and supervisory responsibilities for both elementary and

high school. These school units are variously known as union schools, centralized schools, village schools, or consolidated schools. They have come into existence in a number of ways. Those known as union or centralized schools are usually found in states where the district or township prevails as a unit of administration, and are formed by the union of several independent districts, or of separate schools that had existed within a township. The village schools, as the name implies, were originally organized to serve a rural village, but in the course of time have drawn into themselves surrounding schools, usually of the one-teacher type. The consolidated school is most frequently designated by this name in the states which operated on the county unit plan of organization, though it is difficult to make any statement as to organization or function that would differentiate it from the schools listed as union or centralized.

In addition to the classes of schools mentioned there are a number of open-country schools that employ three or more teachers, but do not properly belong with any of the types named. They are schools that, like most of the two-teacher schools, have grown into their present form without any definite legal status or constructive planning. They do not provide transportation, nor levy a special tax, but may be thought of more as three or more grade rooms operating together under the same roof but with little systematic organization for educational efficiency. They are in most cases unprogressive, and should be reorganized into one of the definite large-unit forms. The median salary paid in these schools, and the average length of term are between those of the one- and two-teacher schools and the consolidated schools. The training of the teachers, however, is much lower than that for consolidated and village schools, though the median experience is longer than any except the village school. From the point of view of educational efficiency there is reason for believing that these larger rural schools, which have not resulted

from a definitely planned consolidation of some sort, are unsatisfactory. One reason for this is shown by the training and salaries of the principals of such schools as compared with those of the schools which combine elementary and high school work. The comparison of these two groups as to salaries and training is shown in Table XII.

TABLE XII

*Salaries and Training of Principals of Rural White Elementary Schools and Principals of Combined Elementary and High Schools. Data for School Year of 1929-30*⁵

	<i>Elementary School Only</i>	<i>Elementary and High School</i>
Median Salary	\$1,382	\$2,038
First Quartile Salary	1,106	1,586
Third Quartile Salary	1,984	2,492
College Training	1 yr. 7 mo.	3 yrs. 3 mo.

It is not strange that many of these multiple-teacher rural schools do little better in holding children through the grades, and in preventing retardation than do the smaller schools. They are too often made up of "sheep without a shepherd," with consequent failure to get out of the ruts of traditional routine into which it is so easy for a teacher of limited training and with ineffective supervision to fall. It is in some measure due to these poorly organized rural schools of larger size that the following conclusion was drawn from a recent study made of the achievements of pupils from larger, as compared with those from smaller, rural schools. This conclusion was:

⁵ Gaumnitz, W. H.—*The Status of Teachers and Principals Employed in the Rural Schools of the United States.*

There were few sizable differences in accomplishment between the pupils in large and small schools, in any subject as measured by the Stanford achievement tests. The fact that there was so little difference in the achievements of pupils from these large and small schools was attributed to the supposition that the larger schools have not been making full use of the advantages they should have by virtue of their size, in such matters as better teachers, better teaching methods, better attendance, better buildings and equipment, and a longer school year.⁶

This failure of the larger rural schools to live up fully to their opportunities, though not so definitely proven as it might be, has been indicated by a number of investigations. Such a situation is a most unfortunate circumstance, and is probably due to the large number of cases where political and personal interests, factional disagreements, and inefficient and timid leadership have operated to hinder the fullest possible development of these schools.

THE VILLAGE SCHOOL

During the three decades of the present century, the rural village has taken on a new importance in American life. Many have dwindled in size and importance with the improvement of roads and other means of communication and transportation, but those that have retained or increased their size seem to have become stabilized as essential factors in rural life. This statement is based upon the findings of the Hoover Commission on Social Trends. Kolb and Brunner, in the chapter on rural life, write:

Just as the open country has discovered a new interdependence with the rest of society, so villages and small towns find themselves in a changing situation. Highways and automobiles now make

⁶ Summary of unpublished Doctor's Dissertation of Thomas L. Nelson, quoted from Bibliography of Research Studies in Education. U. S. Office of Education, 1931-32.

it possible for the farmer and his family to drive to or through several villages in the routine of a day's shopping tour. In like fashion the village finds itself at the crossroads for city travelers and visitors from other villages.⁷

A careful study of village populations from 1910 to 1930 showed that during this time the population of one-fourth of the rural villages of the United States did not change so much as one hundred. Slightly more than one-half increased in population more than one hundred. Slightly fewer than one-fourth lost in population, some losing more than one hundred. The authors quoted above state: "The corollary running all through this story of village growth and decline is the record of relative stability."⁸

As the village has become a stable factor in rural life, it is but natural that it should assume an increased importance from the standpoint of school organization and support. A field survey of one hundred forty agricultural villages in various parts of the country brought out the facts shown in Table XIII.

This table indicates a strong tendency toward consolidation of rural schools with existing village schools. The report quoted states that in the one hundred forty villages studied, the number having consolidated schools increased from fifty to sixty-one during the six-year period. In 1930 two hundred twenty-five open-country schools had become parts of schools centered in rural villages. The trend toward consolidation with village schools was strongest in the South. Here only eight of the thirty villages studied had not consolidated with the surrounding rural districts, and these were in areas having unimproved roads. Where the village school is not made a center by legal process it often becomes such by private initiative. The legally consolidated village schools enroll only a slightly higher proportion of the high

⁷ Kolb, J. H., and Brunner, E. de S.—"Rural Life," Chap. X, *Recent Social Trends*, Vol. I. New York: McGraw-Hill Book Company, 1933, p. 509.

⁸ *Ibid.*, p. 526.

school students from the surrounding farm territory than do the schools in which tuition is charged. Two great advantages result from the legal form of consolidation. The burdens of support are more equitably distributed, and the participation in control gives the farmers a voice in determining the type of education that will be provided for their children.

TABLE XIII

Proportion of Country Pupils in 140 Agricultural Village Schools for 1924 and 1930^a

Regions	Per Cent of Farm Pupils			
	High School		Elementary School	
	1924	1930	1924	1930
All Regions	45.6	49.5	24.0	25.7
Middle Atlantic	41.2	54.8	12.1	14.0
South	41.6	51.3	34.6	44.4
Middle West	45.2	47.6	17.3	18.3
Far West	49.1	46.7	27.1	22.7

There has been a considerable amount of discussion as to whether the best location for a rural school is in a rural village or in the open country. The weight of evidence seems to be that the village is fast becoming an integral part of the community by which it is surrounded, and that the factors which make it a trade and business center will ultimately make it a social, educational, and religious center. In the past there has been a strong tendency to develop a feeling of superiority and separateness on the part of the village population, and jealousy and re-

^a *Ibid.*, p 512.

sentment on the part of the farm population that adjoins it. This seems to be dying out. Communication and transportation facilities will ultimately eliminate the village that does not bring about a spirit of co-operation and understanding between itself and its open-country neighbors. The fact that the rural village seems to be entering into a period of stability would indicate that such adjustments are being made in a great many instances.

With the foregoing discussion of the general problems involved in the organization of multiple-teacher schools, in mind, it is possible to enter upon the detailed discussion of consolidation of schools with a fuller understanding of the questions involved.

There seems to be good evidence that the trend of development in rural education is toward a complete consolidation program, centering in most cases in the permanent rural village. Improved roads will tend to bring social and religious centralization to these villages, together with a permanency of certain adapted types of business, industrial, and professional service, that will make school consolidation more attainable. Two-teacher schools, and the poorly organized schools with a larger number of teachers, will gradually give way to the better organized, less expensive and more satisfying unit, and one-teacher schools will become rare in any but regions of very sparse population. This latter process will be facilitated by the movement toward forestation of the sub-marginal lands and the increase in state and federal equalization funds. The effort to make the one-teacher schools which remain efficient by means of better teachers, better buildings and equipment, and longer terms will result in the discovery that consolidation is cheaper and better.

SUMMARY

Multiple-teacher schools fall into four classes: two-teacher schools; three-or-more teacher country schools; consolidated schools; and village schools. As judged by the salary of teachers,

length of term, holding power, retardation and standardized test results, the two-teacher school has little advantage over the one-teacher school and is distinctly inferior to the other types. This is probably due to the fact that most of them are not planned units but merely overgrown one-room schools. Enrollment in the various grades is such that the three primary grades occupy one room and the five grades, four to eight, occupy the other. Grade alternation should be utilized in the upper room, combining 5th-6th and 7th-8th grades into single classes.

Large-unit rural schools include consolidated schools, non-consolidated open country schools, and rural village schools. Such schools are sometimes elementary only, but usually a combination of the elementary grades and two or four years of high school. Some states permit organization on the junior high school plan, which results in a 6-3 organization for these schools. When elementary and high school years are combined, the salaries and training of principals are much higher, with a consequent probability of a higher type of leadership.

Villages are often centers for consolidation. In other cases they expand to take in a considerable area of territory without formal consolidation. The tendency is for these village schools to become consolidated. Such a change is usually desirable, for it brings a better relationship between village and rural people, and makes the school better adapted to the needs of farm children. The tendency for favorably located villages to develop into genuine rural community centers is quite evident, and as this process goes on, rural life conditions will be improved along all lines.

CHAPTER XI

THE CONSOLIDATED SCHOOL

There was nothing in elementary education in the early days to cause men to think of such an institution as the consolidated school. The "three R's" could be drilled into the few children who came to the early schools without the aid of complex organization, with little teaching equipment, and with a very meager supply of knowledge and skill on the part of the one who taught. Early in the last century, however, there arose a demand for a wider range of subjects in the elementary school. Geography, formal language, and history were added to the basic subjects between 1790 and 1840. By the middle of the nineteenth century the private academy was giving way to the public high school in many places. The seventies saw the introduction of the educational theories and practices of Herbart into America, and before the end of the century both elementary and secondary schools were well started toward the breadth of offerings and the complexity of organization which they were later to assume.

THE DEVELOPMENT OF CONSOLIDATION

The first state legislation providing for what may be thought of as a forerunner of consolidation was enacted by the legislature of Massachusetts in 1820. The act provided for the union of two school districts in adjacent towns. In 1834 a general act was passed in the same state giving general power to unite contiguous districts in any adjacent towns. In 1839 this power was broadened by an act authorizing any two or more contiguous districts

to "associate together and form a union district for the purpose of maintaining a union school to be kept for the benefit of the older children of such associated districts."¹ In 1869 Massachusetts enacted the first law that provided for the payment of the transportation cost of pupils to and from school. The first consolidated school with transportation was established under this act in 1874, at Quincy.²

Connecticut enacted a law permitting towns (townships) to consolidate two or more districts to form union districts in 1839. In that year the first consolidated school was formed in the state at Farmington. Doctor Noah Porter wrote of this school, during its first year of existence, "Our union school is upon the whole doing well—all of the districts in the village are now united in it and it is gaining in public favor."³

The first act for the establishment of union schools in New York was passed in 1853. This act was amended in 1864, and the term, "consolidation" used instead of "union." By 1889 Massachusetts was spending more than \$20,000 per year for the transportation of pupils, and by 1900 its expenditure for that purpose had reached \$100,000 per year. Connecticut had consolidated the schools in 81 of its 168 towns by 1909.⁴

Ohio and Indiana were pioneers in the consolidation movement in the Mississippi Valley, though hindered in carrying out the union of small schools by the township system of school organization and finance. Randolph County, Indiana, became known for the consolidation of its schools, this consolidation being due in large measure to the leadership of its superintendent.

¹ Smith, Payson, Commissioner of Education for state of Massachusetts. Personal letter to the author, October 24, 1935.

² Cubberly, E. P.—"Consolidation of Schools," *A Cyclopedia of Education*, Monroe, Vol. II, p. 187.

³ Butterfield, E. W.—Commissioner of Education for state of Connecticut. Personal letter to the author, October 31, 1935.

⁴ Cubberly—*op. cit.*, p. 188.

ent, Lee L. Driver, during his period of service from 1907 to 1920. At the close of his administration only six one-room schools remained of the original 131 that had served the county twenty years before. The township form of school organization through the northern half of the Mississippi Valley made the progress of consolidation slow in the states which, because of their prosperity, level surface, and relatively dense rural population, should otherwise have made rapid progress along this line. The greatest number of one-teacher schools in the United States is now found in the rural territory extending from New England to the Rocky Mountains.

THE PRESENT STATUS OF CONSOLIDATION

The greatest progress in consolidation within recent years has been in the rural South. Statistics from eleven states of this section, having the county-unit organization as well as the highest average per cent of rural population of any part of our country, show that consolidation is making substantial progress within their borders and is rapidly reducing the number of one-teacher and non-consolidated, multiple-teacher schools. The figures for the two groups of states—the northern group organized almost entirely on the district or township plan, and the southern group organized entirely on the county-unit plan—are shown in Tables XIV and XV.

It is worthy of note that four of the county-organization states have a lower per cent of one-teacher schools than does Indiana, the state with the lowest per cent of such schools in the group having township or district organization; while five of the latter have higher per cents of one-teacher schools than does Kentucky, the state with the highest per cent of one-teacher schools in the county-organization group. The median per cent of one-teacher schools in the county-organization states is 48.9, while that for

the small-unit-organization states is 74.6. Of the 17,008 consolidated schools in the United States, 8,693, or slightly more than 51 per cent, are in the fourteen southern states listed.

Another significant comparison is obtained from data for the

TABLE XIV

Number of One-Teacher, Multiple-Teacher, Non-consolidated and Consolidated Schools in Fourteen States Having Township or District Form of Organization. Data for School Year of 1931-32^a

<i>State</i>	<i>One-Teacher</i>	<i>Multiple-Teacher Non-consolidated</i>	<i>Consolidated</i>	<i>Per Cent One-Teacher Schools</i>
Illinois	19,041	4,096	110	70.5
Indiana	1,830	1,308	992	44.3
Iowa	9,279	2,147	384	74.8
Kansas	6,983	1,856	621	73.8
Michigan	6,141	1,383	290	69.7
Minnesota	6,888	1,513	413	76.8
Missouri	7,296	2,108	406	74.4
Nebraska	6,136	1,132	78	82.0
New York	7,360	3,802	492	63.2
North Dakota	4,754	336	462	94.0
Ohio	3,474	2,218	1,026	50.4
Pennsylvania	6,511	5,058	750	52.9
South Dakota	4,731	487	104	88.9
Wisconsin	6,600	1,640	68	79.4
Totals	88,024	29,084	6,196	66.0

^a *Biennial Survey of Education, 1930-32. Bulletin (1933), No. 2. Washington: Office of Education, 1935, p. 70.*

year 1929-30.⁶ There were 1,014 new consolidated schools established in twenty-four states reporting for that year. Of these new

TABLE XV

Number of One-Teacher, Multiple-Teacher, Non-consolidated and Consolidated Schools in Fourteen States Having the County Form of School Organization. Data for School Year of 1931-32⁷

State	One-Teacher	Multiple-Teacher Non-consolidated	Consolidated	Per Cent One-Teacher School
Alabama	2,800	2,081	699	50.2
Arkansas	2,707	1,759	353	56.2
Florida	946	1,019*	73*	44.9
Georgia	3,288	2,108	706	53.9
Kentucky	6,089	1,723	197	75.0
Louisiana	1,381	1,308	300	46.2
Maryland	833	511	329	49.8
Mississippi	2,879	1,830	988	50.7
North Carolina	1,688	3,186	951	29.0
Oklahoma	2,500	2,894	474	42.6
South Carolina	1,637	1,926	328	42.1
Tennessee	3,080	1,958	882	52.0
Texas	3,100	7,639	1,540	25.3
Virginia	2,607	1,906	873	48.4
Totals	35,535	31,846	8,693	46.8

* Number obtained from Florida Department of Education, is for 1935.

⁶ *Biennial Survey of Education, 1928-30* Bulletin No. 20 (1931), Vol. II. Washington: Office of Education, 1932, pp. 34-35.

⁷ *Biennial Survey of Education, 1930-32*. Bulletin No. 2 (1933), Washington: Office of Education, 1935, p. 70.

consolidations 635 were in the six southern states—included in Table XV—which reported for that year, as compared with 300 in the eleven northern states—included in Table XIV—which reported. More than one-fourth of all new consolidations for that year were in Texas, and 63 per cent were in the six southern states just referred to. In the northern group only three—Ohio with 160, Pennsylvania with 76, and New York with 33—reported more than 25 new consolidations during the year. This is not to be taken as indicating a lack of interest in the consolidation of schools in the North, but rather the greater ease with which the program can be carried out in states which have their schools organized on the county-unit plan. The twenty-eight states compared in Tables XIV and XV have in them 123,559 one-teacher schools, or 86.4 per cent of the total number found in the United States. The New England states, New Jersey, Delaware, and West Virginia contain 9,003 of this type of school, while the eleven states to the west of those listed in Table XIV have the remaining 10,883.

ADVANTAGES OF CONSOLIDATION

Those interested in the welfare of rural children and in maintaining the permanent quality of the rural population of the United States, should understand fully the advantages which are resulting from the adoption of the consolidated type of school organization by the more progressive communities of our country. They should also be aware of the greater ease with which consolidation is effected in states organized under the county system as compared with those which employ the smaller units of organization. If this latter understanding could be more fully brought about, more states would doubtless follow the example of West Virginia, which, for the purpose of saving the public school situation, called a legislative session during the summer of

1933 and established a county organization of the most approved type throughout the state.⁸

The outstanding advantages of the consolidated school may be stated as follows:

1. It makes possible the grouping of pupils according to age and ability to achieve, so that instruction and learning may be carried on with maximum efficiency and at a minimum cost in proportion to the quality of service rendered.

2. It enables school boards to secure a higher type of teacher since the best teachers are always attracted by teaching conditions which make the best results possible.

3. It reduces overhead expenses so that a larger proportion of the funds expended will bring a definite educational result, thereby proving an economy to the governmental units which finance the school.

4. It saves in the cost of teaching equipment since it is often possible for two or more rooms to make use of the same articles, such as library books, maps, globes, charts, musical instruments, and demonstration materials in nature and science instruction.

5. It makes possible a broader curricular offering, in that way meeting the needs of children more fully and serving society more effectively.

6. It makes effective supervision possible, and consequently improves the results obtained by teachers of a given standard of training, experience, and teaching ability.

7. It provides an opportunity for a fuller development of the physical, mental, cultural, and moral natures of the children through larger common-interest groups, which can work together with greater profit in all forms of class and extra-class activities.

8. It provides a better social center than does the small school, more nearly corresponding to community boundaries as determined by other factors.

9. It makes better living and social conditions possible for the

⁸ Keesecker, Ward W.—"West Virginia's Stride," *School Life*, 19: 26, October, 1933.

teachers employed, thereby introducing another factor that tends to improve the type of teachers secured for consolidated schools.

10. It improves attendance, as to actual numbers, regularity, and punctuality, thereby increasing the efficiency of service rendered to society.

11. It provides better health conditions and moral surroundings for children on the road to and from school.

12. It broadens the outlook of rural children by throwing them with a greater number of associates, and thus relieves them from dependence upon near neighbors for companionship.

13. It makes possible high school training for many children who could not obtain it otherwise.

14. It is an invaluable agency for equalizing opportunities between sections, and placing the financial burden of educating children upon the wealth of a state instead of upon parents or a small, poor community.

Other advantages might be added to this list, but they are not needed to make a strong case for consolidation. Some objections are offered to consolidation of schools, such as the dangers of transportation, the breaking up of old community lines, and the loss of control of the school by local communities, but these are largely unfounded and when they do exist, they are due to faults in organization or management rather than to the intrinsic features of the system. The little community of the past has been rendered obsolete by better roads, rapid transportation, and better means of communication; in its place has come the modern rural village with its better facilities for trade, for entertainment and for religious worship. It is natural that the school community should be enlarged to correspond to this new type of social organization.

TYPES OF CONSOLIDATION

There are four general types of consolidation, as expressed in terms of the completeness or partial nature of the process. These

types are: (1) complete territorial and grade consolidation; (2) complete territorial and partial grade consolidation; (3) partial territorial and complete grade consolidation; (4) partial territorial and partial grade consolidation.

Complete Territorial and Grade Consolidation.—This is a condition wherein all of the grades of all of the schools within a given unit of organization are brought together into one or more multiple-teacher school units. This might take place in a state with the district system where a group of contiguous districts unite to form a union or central school. This type of consolidation is found in a very fine form in the state of New York, where central schools are being formed rapidly by such voluntary district union. The ultimate size of a union district of this type is dependent upon community of interest. In states with the township organization they may unite their schools separately, or combine into multiple-township units. Complete consolidation has been effected in the twelve townships of Randolph County, Indiana. Sixteen schools have resulted from this consolidation. The greater number are intra-township, some are inter-township units.⁹ In states having the county unit, complete consolidation is relatively easy of attainment, since all schools are under control of the county board and can be united according to the dictates of its judgment.

Complete Territorial and Partial Grade Consolidation.—This type of consolidation is frequently found. In some cases all the elementary pupils are left in the small schools and the four-year high school students are transported to a central school. In other cases only six elementary grades are left in small schools and the junior and senior high school students are transported. Occasionally only three or four grades are left to make a one-teacher unit, and all grades above are transported. This form of con-

⁹ From letter to author by Supt. Glen O. Chenoweth, of Randolph County, June, 1937.

solidation is often a step toward that of the first type, and is justifiable at the outset as a means of economy. It involves a smaller investment in the central plant and transportation facilities, and the old buildings often provide ample room for classes and other activities for the small group remaining in them, enabling a good teacher to do a superior type of instruction, though the social values of the larger group are lacking.

Partial Territorial and Complete Grade Consolidation.—This type of consolidation is often objectionable, as it frequently leaves certain areas so stranded that it would be impossible ever to get complete territorial consolidation without a re-locating of districts. It is usually the outcome of undirected development, where neighborhoods or villages form consolidated districts largely upon their own initiative.

Partial Territorial and Partial Grade Consolidation.—This form of consolidation frequently arises from the high school maintained by a rural village drawing tuition students from surrounding territory. Frequently upper grade students enroll in these high schools. If such a process results in an extension of the boundaries of these village districts to include the territory from which pupils are drawn, it is not objectionable, except as it might affect a wider program of consolidation. If the tuition plan continues, however, it gives rural children a school which is controlled by village people, and which is frequently poorly adapted to their needs.

Complete territorial and grade consolidation is the type toward which progress should usually tend, though the complete territorial and partial grade type has many advantages over this type, especially where topography, roads, or climate make transportation difficult. In such cases it may be better to leave smaller children in one-teacher or two-teacher schools permanently, or until the hindering causes are removed. In some states these small lower grade schools are under the supervision of the prin-

cipal of the central school, and are greatly aided by this association. The central schools of New York, 141 of which have been established since the law providing for them was enacted in 1925, work along this line. The Director of Rural Education of the state says: "The central school law definitely recognizes the advantages as well as the limitations of the small school, and provides that such schools may be continued for pupils of the six elementary grades, where conditions of topography or climate make their continuance desirable. At the same time it provides for the central school wherein the older girls and boys may have the opportunities adapted to their needs."¹⁰

PROMOTING CONSOLIDATION

Every person interested in the betterment of rural life, and in making education contribute to this end in the largest possible degree, should be a promoter of consolidation. Teachers have their part to play in this cause, school officials theirs, parents theirs, and tax-paying citizens theirs. The consolidated school of any type is a better institution for the training of citizens than is any form of small-unit school. The money value of education has been sadly over-emphasized during the past three decades, but there seems to be no doubt that the community which develops a good school of the consolidated type will gain in both spiritual and material values. America today is in need of a consistent and persistent educational campaign to convince the general public that good schools are of the most vital importance to society as a means of securing a permanent prosperity for its entire citizenship, and that type of cultural development which will give the fullest measure of satisfaction from the leisure time which modern science has not only made possible, but necessary. The one- or two-teacher school can do a fair service so far as

¹⁰ Snyder, Ray P.—"The Central School District Protects Rural Children," *The Nation's Schools*, 12: 27, July, 1933.

training in the formal tools of learning and expression is concerned, but such an institution cannot adequately provide that broader and richer training which ministers to the higher needs of humanity and which must be neither incidental nor cheap. Consolidation must come as the result of careful planning and liberal spending. Those who wish to become active in the promotion of consolidation will face one of two existing situations to which they must adapt their methods of procedure. One is found in states where schools are organized on the county-unit plan, the other in states which have the small-unit form of organization. Each of these will be discussed in the pages that follow.

A Consolidation Program in County-Unit Systems.—Consolidation in a county-unit system should come as the result of a county-wide plan, not as an outgrowth of sporadic interests which may develop only in certain communities. Such interests may initiate the movement, but they should not be permitted to go too far until a survey of the county is made, and a plan for future development carefully formulated. Every county should look forward to complete territorial consolidation, and if many units are established before the study and planning are completed, work may have to be undone at a large expense and with dissatisfaction on the part of communities affected.

Many factors must be taken into consideration in this county planning. The more important among these are topography, established trade centers, prospective highway development, density of population, probable population changes, and trends in normal population for various areas. Each of these factors merits more definite consideration.

Topography enters into a number of the other factors mentioned, but deserves attention apart from them. Stream valleys with their dividing ridges may be the factors which determine neighborhoods, trade centers, the location of churches, and social

unity. Certain sections may be level, fertile, and suited to machine farming. Here farm owners may be few and renters numerous. Another section may be rolling, but fertile, and suited to small farmers who work their fields with the aid of their children. A third area may be characterized by narrow valleys and steep hillsides with a small population which is apt to diminish rather than increase as time passes. Each of these features will have its effect upon the location of school centers and must be given due consideration in planning the program of development. High dividing ridges between open stream basins in certain sections, swamps or lakes and rivers in others, are among the natural features which may make it necessary to establish schools within a short distance of each other, but inaccessible to a common center.

Existing local trade centers are good locations for consideration in the establishment of consolidated schools. Not all local trade centers should be made school centers, but in a majority of cases villages should be used as locations for consolidated schools. In the case of old settled regions it will be necessary, in many instances, to choose between a growing or stabilized village and a declining one in selecting a site for a central school. The following examples will indicate the nature of this problem.

A good southern rural county, about four hundred square miles in area, has seven consolidated schools offering eight years of elementary and four years of high school work, and ten consolidated elementary schools. Each of the seven larger schools is located in a village with a population ranging from 300 to 400. All these villages date back well into pioneer days. In the days of horse travel over bad roads, each village filled a need. At present they are too small to maintain an adequate school system. In spite of the fact that each school is too small for efficiency and economy, and that the seven schools could be easily combined

at three centers, the county superintendent asserts that local pride persists in resisting any union of schools.

An old and rather aristocratic village, with a population of four hundred, located in a rich farming section, was missed by a line of railway that was built through the section in the late seventies. Soon after the railway was built a new village sprang up two miles from the original one at the place where the "turn-pike" running from the older village crossed the railway. The new village grew to be larger than the old one, but its people lacked the "class" that the older village claimed. Each of those villages is still maintaining its own graded and high school at very high unit cost and low efficiency, but pride and prejudice resist every effort of county and state authorities to get the two together at either place, or on neutral territory. Each seems determined to pay the high cost of its own "rugged individualism." A progressive county superintendent has established an excellent ten-teacher consolidated school at a village smaller than either of the two mentioned, about five miles distant. This village is connected with the others by good roads. The ultimate result will be the absorption of the high school students, at least, from a part of the warring territory. Another unit will be established about as far on the other side of them. The final result of this self-centeredness is easily foreseen.

Another superintendent was attempting to consolidate her county. An old district, having nothing but a "history," two slovenly-kept stores, two run-down churches, and a dozen homes, bitterly opposed consolidation with a good graded and high school two miles away. The State Department of Education was asked to send a representative to meet with the county board and attempt an adjustment. Nothing was accomplished. Later another representative from the department was sent into the objecting district to bring about peace. A man standing on the steps of one of the stores expressed the sentiment of the district in

these words, "I went to school in Old — School, my father went to school there, my grandparents went to school there, and it will never be closed." The representative went home and sent this message to the county board, "No peace possible; consolidate by the authority you hold." The board followed instructions. Before the end of the first school session all the objectors, except a very few taxpayers with no children, were enthusiastic supporters of the movement. These instances show the kind of problem that the rural villages often create for those who are attempting to develop a consolidation program.

The county school board should work in close co-operation with the state and county road authorities in developing a consolidation program. In many cases existing roads will be re-located as a road program for state and county is developed. Local roads, under county control, will usually be located out of consideration for trade centers and population needs, but through-highways often ignore trade centers entirely. The result of this is that in many instances an excellent location for a consolidated school may be created at the intersection of such a highway and a local road. It is usually possible for a school board to ascertain the road-building program for a considerable time ahead, and in this way avoid unwise location of schools.

Population changes have a very important relationship to school locations, and it is fortunate if boards can forecast in advance what they will be. Good farming land, if level and extensive, is apt to develop machine production with a decrease rather than an increase of population. The same is true of grazing lands. Soils adapted to orchards, small fruits, and vegetables, with good market facilities, usually develop a greater population density than areas devoted to general farming. Much poor, hilly soil should, and usually does, go back to forests with the result that the population maintained on it while timber was being removed will almost wholly disappear. Villages of considerable

size are often built up about lumber mills, with a certainty that they will be practically abandoned within a few years; the same thing is often true where mining operations are developed. All of these elements should be taken into consideration in the locating of central schools. Population statistics for a few decades will often prove of great value in forecasting future school needs.

In formulating a program of consolidation, a map should be constructed showing the school population that will probably be served by each unit established, with estimates as to increases or decreases during a considerable period of years. In this way locations may be made wisely and building done with a more certain knowledge as to the demands that will be placed upon each school plant in the future. A movement that will require much expense on the part of the public, and which will mean much to those who are being trained for more effective citizenship, is certainly of sufficient importance to warrant the type of planning suggested above.

Consolidation Programs in States Having Small-Unit Organizations.—In states which have township and district organization, consolidation may be somewhat more difficult of achievement, but it is readily attained where state laws have been wisely enacted and public opinion is properly stimulated and directed. In such states the first legal steps must be taken by the small units which would combine to form the larger schools, but strong professional leadership will sometimes accomplish as much under such circumstances as where the type of local organization is more favorable to consolidation.

New York state is an excellent example of how the handicap of the small-unit system may be overcome. That state enacted a central school law in 1925 which has been of very great value to rural communities. The more important provisions for establishing such a central school district are as follows:

A central school district should consist of a group of existing districts around a natural and logical center and such central district should include all the territory that reasonably may be included therein. The social and economic community interests and activities of the people will aid in determining the extent of the territory that should be included in such a central district. Central school districts must possess resources in population and taxation sufficient to insure well-organized, graded instruction in elementary and high school subjects. In districts maintaining a school at the time of formation of the central school district the law requires the continuation of such school for pupils up to and including the sixth grade, until the legal voters of such district at a meeting duly called authorize the central board of education to discontinue it.¹¹

The preliminary steps for establishing a central school district are quoted from the same bulletin as follows:

1. District superintendent or superintendents of district or districts to be organized into the central school district, must make application to the Commissioner of Education for permission to organize such district.
2. A map showing boundaries of districts to be included, and location of present buildings, must be prepared and presented with the application.
3. Full description of each school under present conditions, and tentative outline as desired in the central school district, shall be submitted.
4. Full information showing routes of transportation shall be presented with the application.
5. Necessary data shall be included in the application to show the taxable resources, present school cost, bonded indebtedness of present districts, and contemplated expenditure under the new plan.¹²

¹¹ *Central Rural Schools*. Bulletin No 882. Albany: University of the State of New York, August, 1927.

¹² *Ibid.*

The method for providing state aid is well stated in general terms by Ray P. Snyder, State Director, Rural Education Division:

Briefly stated, the law carried out the equalization principle by providing that each central district shall be entitled to all the aid to which the separate component districts were entitled, and also to all aid to which the central district as a whole would be entitled if it were a union free school district. This means that a central district receives all of the equalization and other quotas to which the separate districts were entitled, and also the equalization and other quotas of a union free school district, considering the central district as such. The limiting factor is that a central district may receive only such an amount as is actually expended in excess of what is received on a tax of five mills levied on the full valuation of the central district. In addition to these quotas, each central district receives building and transportation quotas equal to one-fourth of the cost of new buildings and one-half of the cost of transportation.¹³

Under the excellent laws of New York, consolidation and centralization have gone on rapidly with great advantages to the rural communities. In the article referred to above, Mr. Snyder quotes a farmer of the state as saying, at a hearing held in Albany in regard to the rural school situation that had developed as a result of business failures, the closing of banks, and low commodity prices:

The central school has been the outstanding factor in meeting the situation. With funds low and no employment, our children turned to the school library in their spare time. They returned to school and took postgraduate courses. There are few parents in the district that have not attended some of the meetings of the Parent-Teachers Association. The school has been of untold value. For the first time our rural children have a chance.¹⁴

¹³ Snyder, *op. cit.*, p. 27.

¹⁴ *Ibid.*, p. 27.

This, in spite of the fact that the minimum support for a one-teacher school in New York is \$1,500.

The effect of a law enacted by the Illinois Legislature in 1911¹⁸ on the development of rural high schools shows a similar influence of provisions for the disregard of arbitrary boundaries in the formation of school districts. The act referred to provided for the formation of a high school district in "any contiguous compact territory" without regard to township lines. During the five years following the enactment of this law the number of rural high schools in the state increased from seventy-one to two hundred and fifty or, roughly, 350 per cent.

Transportation.—A serious problem that often develops in connection with a consolidation program is that of pupil transportation. School boards are inclined to feel that bus-driving positions offer an opportunity to take care of personal friends or political associates. Frequently, too, busses are privately owned, giving an added opportunity for commercializing the service.

Best judgment approves publicly owned busses of a standard type, operated by men of good character and personality who are competent and safe drivers. Privately owned and operated busses are frequently old trucks or cars equipped with home-built bodies and uncomfortable seats. Administrative officers should watch carefully the cost of transportation. Many states show a wide range of cost among the counties. Tennessee, in 1933-34, had an average monthly cost per pupil of \$1.42, and a range of from 52 cents to \$3.25. Out of eighty counties reporting, twelve paid less than one dollar per month per pupil and nine paid more than \$2.25. Any marked deviation from a state average cost should be carefully scrutinized to determine whether inefficiency or waste or both enter in as factors in this variable cost.

¹⁸ Johnson, Charles H.—*The Modern High School*. New York: Charles Scribner's Sons, 1916, p. 45.

SUMMARY

Consolidation of schools originated in New England a century ago. Contiguous districts were allowed to "associate together to form union districts" as early as 1834, but no provision was made for transportation of pupils at public expense until 1869. The movement spread to New York and the Middle West before 1900. Since then it has extended to all parts of the nation with the most rapid extension in the southern states. For the year 1931-32, 17,008 consolidations were reported to the United States Office of Education. Slightly more than 50 per cent of these were in the fourteen southern states reaching from Maryland to Texas.

Consolidation brings many advantages to rural communities. The advantages may be summarized by saying that consolidation makes possible a broad curriculum, excellent teaching, and a rich social life within the school. Local interests should not be permitted to determine the location of consolidated schools. Where the county is the local unit of school control, a careful survey should be made to determine the points where schools can be located to best serve all of the people of the county. In states where district or township organization are units of school control, care should be taken to form school unions about natural community centers already determined by business centralizations, or near intersecting points of main highways. The chief hindrances to consolidation are community jealousies and rivalries, poor roads, natural barriers, and public indifference. Transportation often brings complications because of the desire of the board to employ unsuitable persons as drivers of busses or wagons. Standards of qualification as to character and personality, almost as high as those for teachers should be required of bus drivers.

CHAPTER XII

THE RURAL SCHOOL CURRICULUM

Before effective thinking can be done in regard to the selection of general curricular content for any part of a formally organized educational system, there must be set up clear, appropriate, and attainable objectives to be achieved by that unit. Preliminary to setting up such achievement objectives there must be at least a tentative agreement on the part of those who are thinking together as to the nature of the educative process, the means by which it is carried on, and the outcomes which are to be attained. With a full recognition of the difficulty involved and of the impossibility of finding or formulating a one best statement as to the process and results of education, an effort will be made to give such expression to the matter under consideration as will enable writer and reader to have the largest possible degree of harmony of thinking in the further consideration of this subject.

THE ESSENTIAL NATURE OF EDUCATION

Education may be thought of as the process of changing conduct by means of the acquisition, retention, assimilation, reorganization and utilization of experiences, personal and vicarious. The essential outcome of the educative process, according to this view, is a change of conduct on the part of the individual being educated. It is good education from the point of view of society if the conduct of the individual becomes of higher value to society. It is good education from the point of view

of the individual if it increases his permanent happiness and higher satisfactions in life. Good education in the truest and fullest sense will achieve both of these aims. If conduct is changed in such a manner as to make it less valuable to society and less permanently satisfying to the individual, it is none the less education. The burglar is educated by the skill, knowledge, and attitude he has acquired through experience and instruction, but it is bad education since the result is a harm to society and only temporary satisfaction to himself.

Each of the five modifying terms used above in defining the educative process is essential to the definition. *Acquisition* and *retention* are essential because an experience must be preserved for future use by means of the receptive and retentive power of the nervous mechanism of the individual. *Assimilation* is essential because experiences and knowledge are useless until they are properly organized into a pattern with former related experiences. *Reorganization* is essential because thinking and the formation of ideas demand the continuous process of readjusting experience-patterns and thought-units into new forms made necessary by the acquisition of new experiences. *Utilization* is essential because only when inner changes emerge in the form of conduct can education be said to have taken place. The term conduct, however, must be thought of as a subjective as well as an objective phenomenon. In the first sense it is manifested in the form of judgments, of ideas, of interests, of attitudes, of appreciations, and of ideals. In the second sense, conduct takes the form of observable actions carried on with reference to the environment of the individual. Thus the utilization of experiences is the pragmatic proof that education has taken place.

With this conception of education as a working basis, the various agencies which bring about the process will be considered.

TYPES OF EDUCATIVE EXPERIENCES

There are two general types of educational experience which combine to bring about the development of the individual. These are, first, the life-experiences which arise from the entire environment, and second, the socially regulated experiences which come through agencies such as schools, churches, and other instructing institutions. They may be designated respectively as the informal and the formal agencies of education. Under these heads they will be discussed.

Informal Education.—A very large proportion of the education which any individual receives is the result of various informal educative influences with which he comes in contact during the daily routine of life. In the early life of the race these informal agencies were the only factors involved in the education of the individual. They included association and communication with parents and other members of the family or clan; the simple occupations connected with food-getting and the preparation of clothing and shelter; hunting, fishing, and fighting; play, sports, dancing, and various ceremonial rites. These activities brought the child, the youth, and the adult such training and education as he was to receive.

As life increased in complexity, formal agencies were introduced to supplement the informal ones. The arts of war, religious rites, the more difficult phases of the simple crafts, were taught in each succeeding generation by those individuals most skilled in them. The invention of movable type, the Renaissance, the period of discovery and national expansion, and the Age of Science, increased the complexity of life so rapidly that formal education became necessary in every field of skill and knowledge. Today "education" and "schooling" are often thought of as synonymous, and the great importance of informal education is sometimes forgotten. It is impossible to

determine what part of the education of any individual is the result of one or the other of these influences, but undoubtedly the most highly schooled person owes a very considerable part of his education to the informal agencies that have acted upon him, and to which he has reacted. Each generation has seen an increase in the amount of formal education demanded to fit the oncoming one into the complex social order of which it is to become a part, until this work has become a major social activity in the more advanced nations of the world.

The more important agencies involved in informal education may be listed as: home associations, occupations, social contacts, recreation and sports, informal reading, moving pictures, the radio, the nature environment. The relative importance of each of these agencies, as compared with the others and with formal education, changes as advancing civilization modifies social, economic, industrial, intellectual, ethical, and religious life. Each will be considered briefly as it has been affected by recent changes along the various lines mentioned.

Home life.—Modern conditions have removed from home life many of the educative influences which formerly characterized it. Schools today care for the children of the family for a large and increasing proportion of their lives from the kindergarten age through the high school, in this way lessening not merely the responsibility but also the possibility of the home as a force in molding the life of its children. The proximity of homes, in terms of actual distance and of the time required to go from one to another, tends to break up family unity and thereby decrease the influence that parents have over the development of their children. Another result of home proximity is the frequency with which the family is broken up for the evening by the members going to places for calls, amusement, or other purposes. These factors are more important in cities, towns, and villages than in the open country, but even there

they have profoundly modified the relation of the home to the development of children.

Occupations.—The application of power and machines to all forms of production has changed greatly the educative value of practically all occupations. The shoemaker of former days, who carried on the entire constructive process from hide to finished shoe, gained much in knowledge, in thought-power, and in character from his occupation. This is not true today, however, of the operative who, day after day for the major part of a lifetime, stands by a machine which does but a single part of the complex process of shoe manufacture. He does not think, he does not plan, he is little more conscious of the product toward which he contributes than is the machine which he tends. Every type of manufacture is being brought under this efficient but deadening process, with the result that the educative power of occupations is becoming less and less, as scientific efficiency increases. This is not true to such an extent in the various activities that engage the farmer and his children, but even here many types of work have lost much in educative value as compared with the more primitive methods of the past. Housework, too, has suffered in the same manner. The commercial production of a vast array of commodities which were once made in the home, decreases the educative value of housekeeping, though they permit a surplus of time and strength for the acquisition of other forms of knowledge and for the utilization of the formal educative opportunities.

Social contacts.—Social contacts are more numerous and varied now than in the past, but this does not mean that they have a greater influence in developing ability, character, and personality. What has been gained in the number of contacts does not make up for the loss in intimacy of association. It is doubtful if a bridge table can ever be as effective as a sewing table in the development of real friendships, or a modern call take

the place of an old-time visit in bringing about a sympathetic understanding between the members of a community. Evil will result if prying curiosity takes the place of a sympathetic interest between associates, but such total ignorance concerning those living near by, as is often found in urban life, is productive of bad social attitudes. The village may possess advantages in offering opportunities for social contacts superior to either the relative isolation of the open country or the crowded conditions of the city. If so, this may be one of the factors that will make rural life become increasingly village as time goes on.

Recreation and sports.—Like social contacts, recreation and sports have both gained and lost as a result of modern development. Speed attained, distance traveled, and variety of scenes reached have come to be dominating elements in much that is termed recreation with the result that those indulging in it are wearied rather than re-created. A hundred miles in a motor car is substituted for half a dozen on horseback, or one on foot, to the physical and often the spiritual disadvantage of the person concerned. Sports have become so highly organized and sadly commercialized that the great majority of Americans engage in them vicariously rather than personally. The major American sports, as played for the entertainment of spectators and the profit of promoters, have educational advantages, it is true, but these are far different from those in which the individual engages in the true spirit of play, and in most features inferior to them.

Informal reading.—There was never such an abundance of reading material available and at so low a cost as at the present time, but much of it is of questionable value so far as its educative results are concerned. It may bring about a change in conduct, but the individual or social values resulting are frequently negative. Newspapers are found in almost every home, but they stress the sensational and spectacular too much for the

best interests of those who read, and are often so biased in their attitudes that it is impossible for the reader to become fairly informed from them. This rich field of informal education is often closed to the person of limited formal education because he lacks training in regard to what he should read and how to utilize that which he reads.

Moving pictures.—This agency for informal education has wonderful possibilities to which it has never attained. Commercial interests have used it to their advantage with the result that in many instances it is not informing, inspiring, or uplifting, and only entertaining on a low level. In order that it may contribute richly to life, schools must prepare children to appreciate what is really worth while in moving pictures, and influence the public to demand entertainments of the best type for them. As with reading, so the value of this informal influence is in large measure determined by the type of formal education provided.

The radio.—What has been said of the moving picture may be repeated with equal propriety in regard to the radio. Its possibilities are almost unlimited, but they can be reached only when the listening audience is trained by formal agencies to appreciate the best that can be provided. Until such time, much that is "on the air" will be as unsatisfactory as the offerings presented on the screen.

Nature environment.—Nature as a factor in education is very largely a privilege enjoyed by the rural dweller. City children have nature contacts through sunlight, moonlight, weather, house plants and pets, parks and gardens, but they lack the intimate association with a great variety of nature which rural children enjoy during almost every waking hour. The nature environment is the farm child's special heritage, but too often it is relatively meaningless to him because he does not have the intelligent guidance necessary to give full understanding and

appreciation. Parents are rarely able to give such guidance, and the average rural teacher is even less able to help the children in this field. As a result an informal influence that should be very rich in educative value is almost wholly lost to rural children. The power manifested in a storm, the glory of a sunset, the quiet beauty of a moonlight night may have some value in developing the better nature of a child, but without the aid of one who has a fuller knowledge and understanding, very much of their possible value is lost.

From the above discussion of the informal educative agencies it is readily seen that the makers of curricula for rural schools need to keep in mind the forces outside of the school that are active in the education of rural children. The more fully the formal education which is provided for children is connected with the informal influences which act upon them out of school, the better will be the results obtained. The greatest weakness of our educational efforts lies in the failure to blend formal and informal agencies into one by the fullest possible utilization of the interests and experiences of the out-of-school life in the formal work of the school.

Formal Education.—The chief agencies of formal education are: schools of all levels and types, the church and its auxiliaries, lecture courses, and other institutions that exist specifically for the purpose of bringing about educative results. Formal education should always be directive, corrective, and supplemental in its relation to informal education. It should be directive by guiding the child in gaining the fullest measure of value from out-of-school experiences. It should be corrective in that it must definitely plan to correct those things which informal agencies have produced in the life of the individual and of the social group concerned which are individually and socially undesirable. It should be supplemental in that it must add to what is done for the child outside of school. This relation of

formal to informal education places two specific duties upon the makers of the elementary curriculum. There must be a certain general content included in the program of all elementary schools in order to meet the general conditions of life that are common to an entire state or nation. In addition there must be opportunity for modifications that are necessary to meet the needs of communities or groups which have peculiar needs not generally found. These peculiar needs usually arise from differences in occupational, social, or natural environment, and can be fully met only by a clear understanding of the differences involved. Further consideration of the modification in the program of rural education, elementary and secondary, will be discussed later in this chapter and in the chapter that follows.

THE FUNCTION OF THE ELEMENTARY SCHOOL

The principle that the elementary school must not be made a means of limiting the occupational choice of the individual, or of leading him to follow a given vocation, is quite generally accepted in America. These early years of formal education are dedicated to the task of preparing for citizenship without regard to probable place of future residence, occupation, or social status. Any training calculated in any way to limit the future possibilities of the individual, which is given at so early a period of life as that served by the elementary school, is deemed contrary to the best interests of the individual and of society. It follows, therefore, that any contemplated modification of the rural elementary school curriculum should not be of such a nature as to serve the purpose of keeping rural youth on the farm. Neither should its aim be to develop knowledge or skills which specifically prepare for carrying on the activities essential to successful agriculture.

The essential objectives of elementary education are three. First, to give the child mastery of the elementary tools of learn-

ing and expression; second, to aid him in developing such interests, appreciations, attitudes, and ideals as will be of greatest value to him as an individual and as a member of the social order of which he is to become a part; third, to lead him to a fuller understanding of, and appreciation for the fields of human knowledge in which he has developed an interest through his out-of-school experiences. This is a broad group of objectives and cannot be undertaken without teachers of fine ability and broad training. Less than what is suggested, however, will deprive children of their rightful social heritage and society of the highest type of citizenship.

The first of the objectives stated above includes (1) the mastery of the language skills necessary for elementary reading and expression; (2) the acquisition of such skills in the field of number as will enable the individual to use numbers effectively in the various activities of life; and (3) a knowledge of art and music such as will enable each to express himself in some measure through the exercise of these arts and to enjoy them as they are produced by others. The second objective includes a minimum essential of training in the fields of history, literature, geography, health, and science. The third objective broadens the child's interest in, increases his knowledge of, and deepens his appreciation for his physical, biological, and social environment. By means of this last phase of school work the individuality of the child is developed and a genuine intellectual hunger created which should make of him a lifelong student.

PRINCIPLES GOVERNING ELEMENTARY CURRICULUM MAKING

Before proceeding with the discussion of rural curricular problems it may be well to comment upon the meanings given to the term curriculum by various writers. In many cases the term is used as synonymous with course of study to indicate the various subjects to be taught in a school of a given level, the

content to be included under each, and the distribution of such content in point of time. By others the term is used to include the total experiences, activities, interests, attitudes, and ideals resulting from the presentation of the subject matter provided by the school. If the latter meaning is accepted, there can be no curriculum made in advance of the learning in which teacher and pupils are associated. In this volume the writer will use the word in the narrower sense, though with a broader meaning than is often given it. The term will be used to include the general subject matter formally planned plus such out-of-class contacts and associations as may be sufficiently general to be included in the printed suggestions made to teachers. The broad scope of meaning, referred to above, will be expressed as "curricular outcomes" rather than by the term curriculum.

No effort will be made to discuss the specific content of the elementary school curriculum, but certain basic principles will be set forth which should be utilized in making an elementary curriculum which is desirable both from the social and the individual point of view.

The interests of a growing society require that every member, during the years spent in the elementary school, shall be brought to understand and appreciate those vitally important past experiences of the race that are essential to an understanding of the type of civilization and social organization of which he is to become a functioning member. This demands a wise selection of materials in history, literature, and human thought, adapted to the learning capacity of the child and leading toward such attitudes and ideals as will best promote the development of society in a right direction. Such a selection of subject matter from the vast stores of accumulated race experiences can be made only upon the basis of adult judgment, guided by an intimate knowledge of child life, the laws of human development, and probable future needs of the individual and

society. The child's immediate interests cannot be taken as criteria for selection any more than a child's appetite can be taken as a guide in determining the foods he should eat during health or the medicines he should take in sickness. Interest is essential to the most effective and economical learning, but in case no interest exists in regard to certain types of socially desirable matter it can be developed by the skill of an intelligent and trained teacher. Interest is not inherent in subject matter; it is the direct result of superior teaching ability and a sensitive understanding on the part of the teacher of the children taught.

In addition to the past experiences of the race, which the schools undertake to impart to the developing child, a certain amount of knowledge is needed in regard to the conditions that exist in the world at the present time. This should include a knowledge and appreciation of the manner of life of people in other parts of the homeland as well as in other lands; a satisfactory acquaintance with the facts and forces of nature with which the child is in daily contact and the elementary laws of science which these facts and forces manifest; an understanding of occupations, productions, and institutions of the home community and of various parts of the world; and a fair conception of the part that natural conditions and forces have played in making the earth and its people what they are today. As with the experiences from the past, subject matter relating to the conditions that exist in the world today must be selected because of its value to the individual in making desirable social responses and adjustments.

As an accompaniment to the content suggested above, the elementary school should give to every normal child who spends as many as half a dozen years in it, three fairly well-developed abilities. These are: (1) the ability to appreciate the essential features of his environment, natural and social, (2) the ability to utilize acquired experiences in clear, purposeful thinking,

and (3) the ability to live according to a fairly well-organized system of moral standards.

Any curriculum that attempts to embody the characteristics set forth above will be difficult to construct and to put into operation. It will also be in need of constant revision, since social changes must be reflected in it, if schools are to render the highest service. A serious, intelligent effort to develop such a curriculum is, however, one of the most important tasks that face those responsible for the success of public education and one which cannot be neglected or evaded without serious harm to society.

Curriculum changes must come slowly, especially in an educational unit as large as that of the state. Since rural schools are dependent upon the state for such general control as that which is provided through an elementary curriculum, a considerable amount of time often passes before a badly needed change can be achieved. This should not result in a standstill, however, as excellent curriculum outcomes can be obtained by superior teachers while using the general plan offered by a badly outworn curriculum. Such a curriculum should be fully revised with the least possible delay, but it is unfortunate if teachers fall into the error of thinking that nothing can be done until revision is achieved. Much of the effectiveness of any curriculum comes from the intelligent adjustment of it to local conditions and needs by the resourceful teacher through her ability to use local materials. Such adjustments, and the enrichment that will accompany them, cannot be provided by a teacher of mediocre ability or poor training. If, however, rural schools can be supplied with efficient teachers and an administrative and supervisory service that will encourage, direct, and reward them, much improvement may be made without a fundamental reorganization of the curriculum.

Curriculum revision should be carried on by means of a care-

fully selected and well-organized committee. This committee should include members of the administrative staff, supervisors, classroom teachers, and teachers of special subjects. For advice it should call upon experts in the field of curriculum revision, upon subject matter specialists, and upon authorities on methods of instruction. Wherever possible its tentative plan should be tried out in experimental schools under its own supervision or under the supervision of a teacher-training institution.

RECENT EXPERIMENTS IN CURRICULUM MAKING

The state of Virginia has made a contribution of great value to education in the elementary course of study which it issued to its teachers in August, 1934.¹ For three years, under the general direction of Dr. Sidney B. Hall, State Superintendent of Public Instruction, a large number of educational leaders of the state, aided by a few experts from other states, had been working on the task of developing a course of study that would conform to the best educational theories and practices. The result of the efforts put forth is a course of study differing radically from the traditional type in the content proposed and the instructional procedures suggested. Subject matter boundaries are practically disregarded and the learning activities in which the children engage from the first grade of the elementary school through the last year of high school are organized about eleven major social functions. These social functions are as follows:

1. Protection and Conservation of Life, Property, and Natural Resources.
2. Production of Goods and Services and Distribution of the Returns of Production.
3. Consumption of Goods and Services.
4. Communication and Transportation of Goods and People.

¹ *Tentative Course of Study for Virginia Elementary Schools*. Richmond, Va.: State Board of Education, 1934, pp. 16-19.

5. Recreation.
6. Expression of Aesthetic Impulses.
7. Expression of Religious Impulses.
8. Education.
9. Extension of Freedom.
10. Integration of the Individual.
11. Exploration.

The first six social functions are used in each grade from the first through the eleventh, the end of the secondary school.

The seventh and eighth are used from the beginning of the third grade to the close of the eleventh. The ninth, tenth, and eleventh are used only in the secondary grades.

For each grade a *center of interest* is proposed and each social function is studied during the year from the point of view of that center of interest. The centers of interest for the various grades are:

Grade I.—Home and School Life.

Grade II.—Community Life.

Grade III.—Adaptation of Life to Environmental Forces of Nature.

Grade IV.—Adaptation of Life to Advancing Physical Frontiers.

Grade V.—Effects of Inventions and Discoveries Upon Our Living.

Grade VI.—Effects of Machine Production Upon Our Living.

Grade VII.—Social Provision for Co-operative Living.

Grade VIII.—Adaptation of Our Living Through Nature, Social and Mechanical Inventions, and Discoveries.

Grade IX.—Agrarianism and Industrialism, and Their Effects Upon Our Living.

Grade X.—Effects of Changing Culture and Changing Social Institutions Upon Our Living.

Grade XI.—Effects of a Continuously Planning Social Order Upon Our Living.

A clear idea of the plan can best be given (1) by stating the aspect of each social function that is studied by a given grade;

and (2) by listing the aspects of a given social function as studied by each of the eleven grades. Grade III is being used to illustrate point (1):

GRADE III

Center of Interest: Adaptation of Life to Environmental Forces of Nature.

MAJOR FUNCTION OF SOCIAL LIFE	ASPECTS OF CENTER OF INTEREST SELECTED FOR EMPHASIS
Protection and Conservation of Life, Property, and Natural Resources.	How do people, plants, and animals in communities with physical environment markedly different from ours protect themselves from forces of nature?
Production of Goods and Services and Distribution of the Returns of Production.	How do environmental forces of nature affect the goods produced in different communities?
Consumption of Goods and Services.	Why can communities markedly different from ours furnish us with goods we cannot produce?
Communication and Transportation of Goods and People.	How does physical environment affect transportation and communication?
Recreation.	How does the physical environment influence types of recreation?
Expression of Aesthetic Impulses.	How do people in communities markedly different from ours express their artistic impulses?

ASPECTS OF CENTER OF INTEREST

MAJOR FUNCTION OF SOCIAL LIFE

SELECTED FOR EMPHASIS

Expression of Religious Impulses. How do people in different communities express their religious tendencies?

Education. How do people in different communities provide education?

Point (2): The aspects of one Major Social Function as studied by each of the eleven grades are as follows:

Major Social Function: Communication and Transportation of Goods and People.

Grade I.—How do members of our family travel from place to place?

Grade II.—How does our community provide for transportation and communication?

Grade III.—How does physical environment affect transportation and communication?

Grade IV.—How do ways of transportation and communication serve to advance frontiers?

Grade V.—How do inventions and discoveries improve our means of transportation and communication?

Grade VI.—How does machine production affect transportation and communication?

Grade VII.—How do methods of transportation and communication affect co-operative living?

Grade VIII.—How do improved means of communication influence the behavior of individuals and groups?

Grade IX.—How does the application of power and modern business enterprise to transportation modify our living and thinking?

Grade X.—How do improved means of transportation and communication influence changing cultures and affect relations between nations and people?

Grade XI.—How can modern means of transportation and communication be utilized to enhance the social welfare of nations and people?

Following the introductory section, in which the general plans of the course as given above are set forth, there are four sections dealing with: grade materials, 280 pages; subject matter materials, 157 pages; general teaching procedure, 36 pages; and supplementary materials, 53 pages.

The work done by the curriculum organization of Virginia should be carefully considered by every committee working upon the problem of a state course of study, as it is probably the best effort so far made to provide a curriculum in harmony with present-day tendencies.

The state of Mississippi has been carrying on a curriculum revision study for the past two years. A quite complex technique has been employed by the Research Committee, under the direction of Dr. O. I. Frederick, in an attempt to determine the areas of human activity that can be used to best advantage in organizing instruction in the elementary and secondary fields, and the instructional problems that come under them. The nine areas listed below were finally adopted.²

1. Protection of Life and Health	No. of problems included	41
2. Getting a Living.	" " " "	36
3. Making a Home.	" " " "	35
4. Expressing Religious Impulses.	" " " "	30
5. Satisfying the Desire for Beauty.	" " " "	53
6. Securing Education.	" " " "	35
7. Co-operation in Social and Civic Action.	" " " "	46
8. Engaging in Recreation.	" " " "	34
9. Improving Material Conditions.	" " " "	39
Total number of problems in the nine areas.		349

² *Areas of Human Activity and Problems of Life.* Report of Research Committee working in the Curriculum Laboratory at the University of Mississippi, 1936.

The states of Arkansas, Missouri, and Texas are working out new courses of study along lines similar to the course now in use in Virginia. These experimental courses indicate the strong drift toward the abandonment of the formal subject matter organization of instruction in public schools.

RURAL CURRICULUM MODIFICATIONS

The rural communities of the United States constitute the largest single group in the nation which demands specific modification of its school curricula to meet specific needs. There are five ways in which the informal educative influences of the rural community differ from those found in urban communities to a degree that makes modification of school offerings necessary. These are: (1) the occupational peculiarities of the farm; (2) the intimate association with and dependence upon the nature environment; (3) the unity of rural home and family life; (4) the production-sales responsibility that the farm demands, and (5) the deferred rewards for effort that seem to be an inevitable accompaniment to production from the soil. Each of these rural peculiarities demands a definite, though often slight, curricular modification to bring the rural schools up to their highest state of efficiency. Details as to the desirable modifications that should be made in the content of the various elementary school subjects, follow.

Subject Adjustment to Rural Needs.—Since the general objectives of elementary education are the same for all groups, it is quite natural that some subjects should receive very slight modification in their presentation to rural children. Others that are more intimately related to the essential features of rural environment and life may be very materially modified both in content and method of approach. In order to bring out clearly the differences in emphasis and content, each subject will be

taken up separately and the modifications that seem desirable pointed out.

Reading.—Reading as a tool of learning is basic in education today. In no previous generation has there been available such a vast supply of excellent reading matter, dealing with an almost infinite variety of subjects. So much of modern life depends upon the reading skills of the individual that the elementary school should, and usually does, count thorough training in this subject a matter of first importance. This objective is frequently not attained, but it is retained as an ideal which may be generally realized in the future.

Of greater importance than the mechanical skills required in reading is a well-developed taste for worth-while reading matter that will most fully meet the life needs of the individual. Rural children should be given as thorough a training in both of these phases of reading as urban children. In fact the greater isolation of the rural home makes recreational reading of even greater importance here than in the city environment. Many of the hours spent at accessible places of amusement by city dwellers should be made profitable and pleasant to rural dwellers at home engaged in recreative and informational reading. There are fewer libraries available for country folk than for those of the city, and for this reason the child who is to live on a farm will have need for even better training in the choice of the books, which he will probably buy, than does the child of the city, who can obtain books from a library upon the advice of a trained librarian.

The reading done in the rural elementary school should be broad and selected to meet the needs of children in each grade. Folk-stories, modern children's stories, myths, legends, fairy stories, biography, history stories, suitable poems, and geographical materials should be provided in great abundance, with little if any variation from that which the best city schools provide.

In addition, nature material should be abundant and adapted to the need of each grade; as should be material dealing with farming and country life. While the reading material provided the rural child should not be selected with any vocational motive, it should contain enough agricultural material to give the rural environment a fair chance to secure and hold the interest of the child. In the past the tendency has been to provide so little nature and country life reading material that the farm was placed at a serious disadvantage in the matter of vocational interests.

Language.—Language teaching in the elementary school has suffered very seriously from formalization. The fact that children have from five to six years of language background before entering school, and that after they enter they use language far more out of school than they do in, is often disregarded. Teachers fail to utilize this out-of-school language experience of the child in developing effective speaking and writing habits. They forget that with language, as with every subject taught in the elementary school, the place to begin is at the stage of advancement the child has reached when he comes to them. The purpose of language instruction is to secure the use of correct, clear, pleasing, forceful expression, oral and written, in out-of-school life. General life habits are best built by utilizing life interests in both supplemental and corrective teaching.

Rural children need to develop good language habits as much as do city children. It is unfortunate at this time, when the radio as well as travel and the press are developing speech standards throughout the nation, if it can be said to anyone, "thy speech betrays thee." There are probably few more speech barbarisms in the country than in the city, but they are often of a different type. The rural child will probably use less current slang than the child of the city, but may have more provincialisms and inherited mannerisms. The smaller number of

social contacts, too, may tend to make the rural child a little more subject to embarrassment and to timidity in expressing himself before groups and strangers. This condition makes dramatization, debating, conversation, and various forms of public speaking of even greater importance in rural than in urban schools.

Spelling and writing have few if any features that demand rural adaptation. The written vocabulary of the urban and rural group would differ very little except in special words that deal with the peculiar articles and activities of the farm, and in a wider use of terms applied to nature. As to penmanship, the two essential qualities of legibility and speed should be as well developed in one environment as in the other, and the teacher in either type of school should strive to turn out pupils who have no fear as to their satisfactory attainments in either of these skills.

Arithmetic.—Two distinct tasks lie before the arithmetic teacher and two quite distinct outcomes must be obtained if justice is done the child. One is the development of desirable skills in number operations, the other is the development of satisfactory ability in the reasoning processes necessary for the solution of problems. These outcomes do not differ in essential nature in rural and urban schools, but the means of motivation and the material utilized should differ.

Drill work, to be effective in developing mechanical skills in number operations, should be highly motivated through associating the processes concerned with the real interests of the child. This usually demands that the teacher be familiar with the out-of-school life of the child so that she may be able to draw upon actual interests and utilize real situations for providing drill motive.

In the matter of problem solving there is more difference. The thought materials and situations out of which problems

grow should be largely rural. All types of information that are employed in the arithmetic work of urban children should be included in the work of the rural schools, but with different emphasis. Business topics should be given less attention; the situations involved should be largely those of the farm and small town; and such topics as investments, taxes, insurance, banking and interest should be adapted to the situations near at hand. In measurements and denominate numbers emphasis should be placed upon matters of value to the farmer. The present tendency to view the business applications of arithmetic as a means of giving insight into common business skills, and to consider the whole subject as a phase of social science, will logically bring the thoughtful teacher and the supervisor to adjust these matters about as has been suggested.

Social sciences.—The importance of making local connections and applications in the teaching of the social sciences can scarcely be overestimated. Children are in constant touch with social, civic, economic, and geographic forces, and historical connections are found on every hand. It is relatively easy for the teacher of ability and initiative to enrich the curriculum with supplementary materials from these local sources.

The history offered in the rural schools should have certain important modifications to meet rural needs. It should be made as largely personal as possible and intimately connected with the life of the community. This is more important in rural than in city schools because the rural community life is more personal than that of the city community. Rural children usually know much of the home life and family connections of other children and are personally interested in them. For this reason there are many historical contacts that may be made first-hand in dealing with the rural group. Almost all know of men and women whose lives have extended far back into the past of the neighborhood and whose stories of other days they have

heard told. They have visited in each other's homes and seen old pieces of furniture, old pictures, and dishes that were brought over the pioneer trails from the East, or across the sea by ancestors in their western movement. These form fine approaches to historical study.

Few rural communities have general public libraries, and for that reason the school library should be of unusual richness and variety rather than narrow and scant as it too often is. It should contain well-selected books dealing with history and biography, adapted to the needs of the various grades. Books should be secured which contain material dealing with the history of the many phases of agricultural development. As a supplement to such reading matter the teacher should direct the children in obtaining as much information as possible from parents, grandparents, and others about the changes which they have witnessed in the development of agricultural machinery and power, in the types and varieties of farm crops, in the breeds of farm animals, and in the changes in methods of sale and purchase that have taken place during their lives. Fine historical material may be gathered by such first-hand methods, and it will not fail to grip the interest of children. Booklets dealing with such topics as "Plows, Past and Present," "The Ancestors of the Self-Binder," and "How Cows Have Become What They Are Today," will involve much of language and history and will train pupils in independent study.

Geography should be one of the richest subjects studied by rural children. It should begin in the first grade, and be continued as a separate study or fused with the other social sciences until the conclusion of the high school. The first four years should deal wholly with the various phases of home geography that are so close to the farm child. This should include distances and directions; surface and drainage; rocks and soil; winds, storms, and other factors that make up weather; farm

production and marketing; manufacture, trade, and transportation, as they are known in the local community; sun, moon, stars, and other features of the sky that so insistently challenge the attention of those who live much out-of-doors. Following or accompanying this study of the geographical environment of the child should come a carefully planned and well-executed effort to give each pupil a clear understanding of the forces of nature and social agencies that affect the living of men. Whatever constitutes good geography for the city child should be given the country child with such modifications as to content and method as may be necessary to connect it most vitally with his life environment. The approach may be different but the end product, in a large measure, will be the same. A great variety of interest units such as are suggested in Chapter IX may be used to advantage in the field of social science.

Nature and science instruction.—In no field is there greater need for improving the work of the rural elementary and secondary schools than in the matter of the nature and science material offered. In the great majority of instances there is nothing worth while done in these lines in the elementary schools, and too often what is done in the high schools is formal and ineffective in meeting the needs of rural children. Nature environment is not only the most characteristic feature of life on the farm, but every productive agency in which the farmer engages is based upon it and upon the forces that operate through it. Because of this intimate relation of rural life and occupation to the nature environment, nature and science should be made matters of major importance in rural schools.

Nature instruction and certain phases of geography are identical, but many phases of nature cannot be included as geographical content. The lessons dealing with weather and the work of water, rocks, and soils, are definitely geographical, but most of the biological topics are not. Birds, wild mammals, insects,

lower vertebrates, are rich sources of material in rural school nature work. There is probably no means by which the school can contribute more effectively to rural living than by developing an understanding and an appreciative friendship in the rural child for his living environment. The common fears that children hold concerning many forms of life should be eradicated, and understanding and appreciation substituted for them. This can be done by the busiest rural teacher, and it will frequently result in giving the farm child a radically different attitude of mind toward rural life and farming as an occupation.

Music and art.—In these subjects the rural school is almost as deficient as in the nature work. Here, again, the outcomes attained by the end of the elementary years should be quite closely identical with those of city schools, but the procedure should differ, especially in the art work. The phonograph and radio have made good music of every type available for country schools and homes, though in most cases these agencies are not being used effectively, even when they are available. The phonograph is the more valuable of these two mechanisms because it can always be used when needed, the type of music can always be controlled, and repetitions can be provided as frequently as desired in order to develop appreciation.

When rural school administrators and supervisors attack the problem of providing adequate instruction in music for country children, they will find that the building up of the musical record library is as important a problem as that of building up the reading library. Two groups of records should be provided. First, the permanent records that are the property of a certain school or room; and second, the supplementary records that should be passed around through an entire system. The first group would constitute the minimum essentials with which all children should become thoroughly familiar; the second would provide a breadth and variety of material for the development

of a wider appreciation for different types of good music. In addition to this development of appreciation, the phonograph's reproducing mechanism will serve as a means for developing good vocal qualities in case the teacher is not able to do this alone.

Art instruction in the rural schools should embrace much of the same content as that provided in city schools. It should, however, deal more largely with nature materials and be utilized to increase all types of nature appreciation. Leaves, flowers, insects, birds, twigs, seeds, the grain of woods, fossils and rock specimens, and many other forms of nature materials should be used for forms of art expression. In this way a trained eye and hand will result from the activities that at the same time are deepening the child's pleasure in the things that constitute his environment.

If there is any difference in the need of urban and rural children for training in art and music, the rural group would seem to have the greater need. The man-made environment of the city child is more easily appreciated than is the natural environment of the country child. In consequence, aid in appreciating the rural environment is more necessary than aid in appreciating the environment of the city. Opportunities to hear good music in city churches and in theaters make the provision of good music in city schools less important than in rural schools. Rural leisure is often lonely. Urban leisure is very rarely so. Rural children must be taught how to make good use of this lonely leisure or it will frequently be wasted in idleness of body and mind.

Health and physical training.—The rural school must meet a number of conditions in this field of instruction that do not exist in most of our cities. Necessity has forced cities to install sanitary sewerage systems and adequate plants and equipment for supplying an abundance of pure water. Following these

there have come food and milk inspection, building inspection, medical inspection of schools, and control of communicable diseases. The same cannot be said of rural communities. Scattered population insured freedom from serious soil pollution for generations and a water supply that was fairly safe. The water from the "gushing spring" or the "moss-covered bucket" brought nothing but health and refreshment during those times, but as homes became more closely built over the countryside, soil pollution became more general and health conditions worse. As time passed, typhoid, dysentery, and tuberculosis became scourges of the rural community. In addition to these major diseases the absence of public health service and school inspection permitted a great relative increase in minor ailments such as diseased tonsils, adenoids, defective teeth, eye and ear troubles, hookworm, uncontrolled colds, and the so-called "children's diseases" among rural children. The tendency of the best-trained and most capable physicians to move to towns and cities placed a further health handicap upon the rural communities, with the result that during the past forty years the rural community has lost its advantages in point of health.

The health conditions as briefly set forth above have placed a very heavy responsibility upon the rural school. While responsibility for health and physical development is largely assumed by specially organized agencies in cities, the school must assume responsibility for the improvement of conditions in the country. This means that health instruction and supervision of play and recreation become major tasks in the majority of rural schools. Of course where there is an efficient health service in a county this burden is lightened. In these cases, however, the teacher is even more a partner in the work than she is in the city school. The rural teacher, as a result of conditions which surround her, needs to be a good instructor in all that constitutes good health instruction in any elementary school, and in addi-

tion she needs such training as will enable her to do many of the things which should be done by a school nurse and an expert in physical education. Thus we see that the rural school curriculum in health and physical training must be broadened to meet conditions which are not left to the care of the city school. The relation of the rural school to the community health program is further discussed in Chapter XX.

SUMMARY

A curriculum cannot be formulated until at least a tentative agreement is reached as to the nature of education, and the individual and social objectives which should be attained by it. Throughout this book education will be thought of as a process of changing the conduct of an individual by means of the acquisition, retention, assimilation, reorganization, and utilization of experiences, personal and vicarious. Its essential outcomes will be to make the individual of highest possible value to society and bring to him the fullest measure of happiness through the attainment of the permanent satisfactions of life.

Education is the result of two general types of experience. First, informal experiences resulting from home life, social contacts, sports and recreation, informal reading, moving pictures, radio, nature environment; second, the formal education of schools, lectures, churches, and other institutions that are maintained for their educative influence. The function of elementary education is to give the broadest possible training for complete living and effective citizenship by supplementing the informal education of the home with the formal education of the school. The specific results sought are habits, skills, attitudes, appreciations, ideals, and interests that will result in a permanent intellectual hunger.

The state of Virginia has recently put into operation in its elementary schools a course of study which is constructed along

new lines. It is one that should be given careful consideration by curriculum construction committees in other states. This course largely disregards traditional subject-matter boundaries and organizes all learning activities, in both elementary and secondary grades, about eleven major social functions.

Two general types of content material must be selected in making an elementary school curriculum. The first is the material necessary to give the child an understanding of, and an appreciation for, the vitally important experiences of the race that are necessary to an understanding of the type of civilization and social organization of which he is to become a member. The second is knowledge concerning the social and natural environment of the child, both immediate and remote, as it exists at the present time. The first includes history in all of its phases, literature, art, and music. The second includes geography, nature study, and current social life. Preceding and accompanying the learning of the content material, skills should be mastered, habits formed, and essential abilities in appreciation, thinking, and social living acquired.

The rural elementary curriculum should be the same in essential features as that provided for city schools. Differences should be in emphasis placed upon certain topics, in the interest approach to learning and in the illustrative material used in instruction. The end-results in rural and urban schools should be closely similar. The roads by which the results are reached should be quite different.

CHAPTER XIII

THE RURAL HIGH SCHOOL CURRICULUM

The rural high school has become an essential element in the educational organization of the United States during the past quarter of a century. In 1900 there were relatively few high schools in strictly rural communities, but before 1910 the movement to provide four years of public education above the elementary school for all rural children was well under way. This development was closely associated with that of consolidation, and the unit most frequently found today is a twelve-year school in a single building or in two buildings on a common campus, under the direction of a principal who is in control of the work from the first through the eleventh or twelfth grade. In many sections, however, this movement to provide high schools for rural children preceded the movement toward consolidation with the result that there were developed many small, inefficient, and expensive schools that have made further sound development of consolidation and secondary education difficult.

THE DEVELOPMENT OF PUBLIC HIGH SCHOOLS

The high school curriculum has been affected even more by tradition than has that of the elementary school. The progenitor of the modern public high school was the private academy, an institution developed almost wholly as a means of preparing for college. The colleges demanded a very narrow preparatory curriculum with emphasis upon Latin, Greek, mathematics; and, as the academies had no other important function, they

were wholly subservient to college demands. When, during the second quarter of the last century, public high schools began to appear in the cities of the East, they took over the function of the academy with its relation to the college but slightly modified. With the opening of the last quarter of the nineteenth century those interested in the development of the public high school began to conceive of a broader service for it. They maintained that society owed a debt of education to those young persons who did not plan to enter college which the high school should pay. This precipitated the fight against the domination of the colleges over the high school curriculum, which has gradually resulted in the adaptation of the curriculum to the needs of life rather than to meeting the formal entrance requirements of colleges.

High schools, like elementary schools, began their development in cities and spread from them into the rural sections. Because of the lower per capita wealth of the rural communities which undertook to provide four years of schooling in addition to the elementary grades, and because of the smaller number of students served per unit, these schools were very narrow in their curricular offerings and formal in the type of instruction employed. They were served by teachers of more limited training than were the schools of cities; and buildings and equipment were usually below the city standards. The movement to broaden and enrich the curriculum of the stronger high schools began about the middle of the last century by the introduction of history; by 1875 science of a very formal type was included. Manual training came in a little later, with home economics following soon after. Business courses were provided at about the same time by the larger city high schools. The traditional subjects of languages, mathematics, literature, and history continued, however, to constitute the intellectual diet in the vast majority of high schools until well into the present century.

This was especially true of rural high schools, where the sciences and manual arts were almost prohibited because of their greater unit cost.

The Smith-Hughes Act of 1917 made possible a new type of high school in rural communities. By the provision of this act, federal aid was extended to rural communities desiring to develop a type of secondary education more fully adapted to the needs of rural youth. One-half of the salary of an approved instructor in vocational agriculture or home economics was paid from federal funds and one-fourth from state funds, so that a local unit could secure this type of work by the payment of only one-fourth of the salary involved. The teachers employed for this work were permitted to teach the sciences offered in the schools where they were employed, along with the vocational subjects in which they specialized, so that their addition to the faculties of rural high schools resulted in a better type of instruction in the entire field of natural sciences. The instructors teaching agriculture courses in these schools increased from 4992 in 1920 to 17,222 in 1930, and during the same time the instructors teaching home economics courses increased from 2667 to 7654.¹

THE MODERN HIGH SCHOOL CURRICULUM

There is much disagreement in regard to what subjects should receive major emphasis in secondary education, but there is a general movement away from the domination of the curriculum by the traditional subjects of foreign languages and mathematics. These subjects were probably justifiable in the time of the private academy and of the early public high school, but it is a difficult task to justify their universal inclusion in the

¹ Hill, David S., and Fisher, William A.—*Federal Relations to Education* Report of National Advisory Council on Education, Part II. Washington National Capital Press, 1931, p. 222.

program of subjects offered today. English rightly still holds a prominent place in the secondary school curriculum, for literature has lost none of its charm, and the correct, forceful, and pleasing use of language, oral and written, has not decreased in importance with the development of modern life and institutions. The social sciences have increased rapidly in importance during the past fifty years. This has resulted (1) from the increasing complexity of life; (2) from the nearness of individuals, communities, nations, and races, due to improvements in transportation and communication; and (3) from the multiplication of human associations and rivalries which demand equitable adjustment if harmony and good will are to prevail throughout the world. Natural sciences have become a necessary part of education on every level because of the part they have played, and are playing, in every department of life. Broad appreciations of the so-called "cultural elements" of life are of increasing importance because of the greater amount of leisure that is coming to the average person. Power to think clearly in regard to the practical as well as the theoretical problems of life is constantly becoming more important because of the serious social questions that must be settled today by means of group judgments.

It would seem, therefore, that the modern high school should place emphasis upon the following: English language and literature; the social sciences; the natural sciences; aesthetic training; power to think clearly and effectively; and the formation of social attitudes and ideals such as will insure the highest type of participation in social living. The high school should offer vocational training for both boys and girls, but the curriculum should not be dominantly vocational. Where the number of students is sufficient, five curricula should be offered as follows: (1) college preparatory; (2) general cultural; (3) home economics-manual arts; (4) vocational agriculture; (5) commercial.

CURRICULAR ADJUSTMENTS FOR RURAL HIGH SCHOOLS

The rural high schools probably need about the same core subjects as are provided for city high schools, with certain modifications in emphasis and treatment. Foreign languages and mathematics, beyond arithmetic or a fusion course in general mathematics, should doubtless be omitted entirely where economy demands and made an elective in all other cases. There would seem to be no need for rural modification in either of these fields. The four groups of subjects mentioned above, English and literature, social sciences, natural sciences, and aesthetic appreciation, should constitute the major content of the curriculum, with vocational agriculture and home economics provided wherever possible. For those students not interested in vocational agriculture, there should be provided a course in appreciative agriculture or the history and development of rural life and institutions. Such modifications as should be made for rural schools in the major subjects would be along general lines presented below.

English and Literature.—The rural modifications in this field of study should correspond rather closely to those suggested for the elementary school. Reading interests in nature, science, and rural life should be developed. Dramatics, debating, and public speaking should be stressed and the topics used should deal in large measure with materials of special interest to rural people. Improper language forms should be eliminated from the speech of students, and ease and effectiveness in all forms of oral communication should be developed. Letter-writing and creative writing dealing with environmental matters should be definitely encouraged because of the greater amount of isolation in which farm people live.

Social Sciences.—The history content offered should vary quite a little from that given in city schools. In both American and

European history attention should be given specifically to the development of agriculture and distinctively rural institutions. Emphasis should be placed upon the evolution of farm machinery, upon the history of what may be called "the farm problem," upon the development of farm co-operatives and upon rural social organization. The efforts of the federal government to relieve the farm situation at present through the activities of the soil conservation program should be carefully watched and interpreted. The course in civic problems and government should deal largely with the problems of district and county government, road construction and maintenance, schools, farm marketing organizations, production control, and other matters of local importance. The more general aspects of governmental, social, and economic relations should be treated approximately as they are in city schools. If physical and economic geography are offered, they should be approached from the local and rural point of view. The chief difficulty in the social and political life of the average rural community arises from the injection of personal factors into the situation. In older rural communities families have often lived together for generations and there are strong lines of cleavage and adhesion that make clear thinking and fair decisions difficult, if not impossible. These problems are delicate ones to handle, but if the teacher of the social sciences in the rural high school wishes to make the largest possible contribution to the life of the community which he serves, he must fearlessly but tactfully deal with these matters. City teachers can deal with social problems in *general*, rural teachers find them largely *personal*.

Natural Sciences.—As nature work is of vital importance in the rural elementary school, so is science instruction of vital importance in the rural high school. The economic foundation of the rural community is agriculture, and the foundation of agriculture is laid in the field of natural science. Biology,

physics, chemistry, and meteorology are as essential to the farmer as mathematics is to the engineer. Physics and chemistry are vitally important in the education of rural youth, but because of the high cost involved it is often difficult to provide standard courses in each. This difficulty can be met quite satisfactorily by providing a thorough course in general science as an introductory study for the first year. This course, quite naturally, will not be strong in laboratory technique, but it can give the basic knowledge upon which an understanding of the more common physical and chemical laws and processes are based. In fact, there has probably been too much importance attached to laboratory technique in the high school and in the more general courses in college. When science teachers began to break away from the purely textbook type of instruction—such as was given by means of the famous and really worth-while "Fourteen-week" courses of Steele which were used quite extensively for a number of years following their publication, between 1867 and 1880—the laboratory enthusiasts went to excess in their new method. Since then there have been untold centuries of student time wasted in poorly executed "experiments" which neither developed a scientific attitude of mind nor a clear understanding of the matters with which it was thought the embryo "researcher" was dealing. The high school laboratory has its place in education, and wherever possible the rural high school should have good equipment and make wise use of it. But the entire rural environment is a science laboratory which is often wholly neglected by the teacher who is the product of the technical laboratory method. There are teachers' colleges that give prospective high school biology teachers a thorough course in the anatomy of the frog, but when these students go into their chosen work, it is probably a mere chance if they know the voice of a tree frog when they hear it, or could tell the eggs of a toad from those of a frog if they found them

floating in a pool. In the utilization of its environment in the teaching of science the rural high school has a wonderful opportunity. The science teacher of broad and thorough training can draw from the daily out-of-school contacts and interests of his students a wealth of material in every branch of science. When this material is used as a laboratory basis and supplemented by reading and interpretative lecture-discussion, an opportunity is afforded for a very fine type of science teaching. The chief difficulty is with the training of the teachers who come to this work. Too often they come with thick notebooks from college courses but with little knowledge that will aid them to teach science in a manner that will make it real to those taught. Not only do field, forest, and stream provide wild materials for this type of teaching, but livestock and poultry, field, garden and orchard crops, farm tools and machinery, manures and commercial fertilizers, kitchen, home cannery, and dairy also contribute richly to the science environment of the rural child. Science teachers in city schools have many opportunities to teach science by means of out-of-school experiences and interests, but in most cases the materials for study are to be found in shop or factory, and not in the daily home environment of the students.

From the above discussion the conclusion is readily drawn that in the field of science the rural high school teacher has a fine opportunity for building into the life of the student a clear knowledge of the essential facts of science, an appreciation for the nature environment of the country dweller, and a basis for scientific agriculture that will prove invaluable in the later study and practice of that science and art.

There is no need for comment here upon the courses in vocational agriculture or home economics as offered in the federal aid schools. Those courses, however, offered in schools wholly

under state control, deserve comment. In 1928, 703 instructors in agriculture were employed in the federal aid schools and 1457 in schools wholly supported by states. Light is thrown upon the function of these state-supported schools by the fact that from a typical group of students in Iowa schools who were enrolled in agriculture classes, only 27 per cent expressed themselves as planning to be farmers. The remaining 73 per cent expressed thirty-two other vocational choices.² This shows that there is a place for a non-vocational type of agriculture in rural high schools for those rural youths who do not plan to be farmers. These courses should be given from the point of view of appreciation rather than from that of vocation. They should include much material dealing with the historical development of agriculture, the advantages of farm life, the nature and origin of the rural problems which exist today and the possibilities, financially and culturally, of farming as a vocation. In some cases such a course as this would cause a change in vocational choice in favor of the farm, and in all cases it should result in a citizenship more intelligently in sympathy with the farmer, and more determined to prevent the ultimate development of an American farm peasantry. At the present time there are no texts adapted to such courses, but a teacher with an understanding of the problem can so modify, supplement, and adapt the material found in available texts as to provide a satisfactory course.

Appreciative Studies.—Music and art in their various forms constitute the chief agencies for the development of appreciation, though other subjects, especially literature and science, are important supplements to these. The work of the Danish schools, in reviving rural life and developing the fine spirit that exists today among the Danish country folk, furnishes an

² Irons, Henry E.—*Summary of Studies in Agricultural Education*, United States Office of Education,—Vocational Education. Bulletin No. 180, 1935, p. 95.

example of what can be done for a discouraged, humiliated people, by music and the appreciation of folk-literature.

American rural life has been poor in its musical opportunities, especially since the passing of the itinerant country singing teacher, and there is no more important contribution that the rural high schools can make to rural betterment than to develop musical ability and appreciation among the young people who come to them. This should include group singing, orchestra, and band. There is need for little rural differentiation, though it is desirable to place emphasis upon folk music rather than upon the modern street songs. In the subject of music appreciation the work of the elementary school should be continued by the use of the phonograph and radio. Musical games, drills, and exercises, too, should constitute an important element in the recreational life of the school.

Art work in rural high schools should stress appreciation of landscapes, cloud and sky effects, trees, birds, wild mammals, domestic animals, and a great variety of other nature material. It is important that the general elements of form, color, balance, and proportion be fully treated; and that application be made to home furnishing and decoration, and to the planting of home and school grounds. In many instances beauty may be had without added cost if those responsible know how to secure it. These matters are very closely related to the work done in home economics and agriculture courses, with which subjects they should be correlated in teaching.

Thought Development.—Good instruction must be carried on along two planes, the lower plane of memory and the higher plane of thought. Rural children should be brought frequently to the higher level of thought in their school experiences. No man needs to be a clear thinker more than does the farmer, and from no place can we draw thinkers more certainly than from the rural community. Here there is more quiet, more opportu-

nity for deliberate formation of judgment, more situations that stimulate thought than in the noisy, rushing, artificial life of the city. The rural high school teacher, as well as the elementary teacher in the rural community, needs to make special effort in every subject taught, to train in sound thought processes. How to think, not what to think, is the matter of vital importance. By teaching of this kind prejudices can be eliminated, conservatism be robbed of its sinister elements, and rural population be made a powerful stabilizing influence upon society.

SUMMARY

When high schools began to extend into rural regions near the close of the last century, they were dominated by the college preparatory idea rather than by that of serving the needs of rural youth. Because of small enrollment and limited finances, the narrow, formal curriculum has persisted in rural schools longer and more generally than in cities. Improvement is coming, however, and federal aid for vocational agriculture and home economics has played an important part in bringing it about.

Rural adaptations in the secondary field quite closely parallel those suggested for the elementary school. English classes should stress dramatics, debating, and public speaking for their social and recreational value.

The social sciences should receive special attention with emphasis upon rural interests and local problems. History should include a study of the development of agricultural implements, farm plants and animals and rural organizations. Civics should give special attention to local units of government, roads, and other public improvements, forest conservation, game and fish protection, and education. The results of local factionalism and nepotism should be frankly discussed and their evils pointed out.

Science content and methods should be closely connected with

agriculture, home activities, health and an understanding of the nature environment.

Music and art should be stressed, and glee clubs, orchestras, and bands organized to aid in improving the social life of the rural community.

CHAPTER XIV

THE SELECTION AND TRAINING OF RURAL TEACHERS

The matter of selecting the raw material out of which to make teachers has been seriously neglected in the past. Too often state institutions have been obsessed with the idea that numbers were necessary to secure appropriations, and have thought bigness more important than quality. The smaller private arts colleges have frequently found teacher-training an effective means of increasing attendance and securing funds. The old-line private normal schools were dependent upon fees for their support and could not be expected to select with any degree of care those whom they enrolled. In addition to these factors, legislatures have been very slow in raising standards for licenses, largely because of the intimate relation existing between votes and favors granted to the poorly trained who wished employment in the schools. All the agencies that have the power to select teachers have been too prone to think of the interests of teachers rather than of the welfare of pupils—an attitude of mind that is fatal to the best interests of society.

METHODS EMPLOYED IN SELECTING PROSPECTIVE TEACHERS

In spite of the difficulties mentioned above, the selection of those who are to be trained for teaching is making substantial progress. Three chief methods have so far been relied upon. These are: (1) ability and willingness of the individual to

achieve, as indicated by the high school record; (2) mental test scores; and (3) the ability to succeed in college work as indicated by the marks made during the first quarter, semester, or year. In addition to these health, physical fitness, character, and personality are frequently taken into consideration. A considerable amount of effort has been put forth in an attempt to construct trustworthy vocational aptitude tests for teachers, but so far this work is in too much of an experimental stage to be given any great weight. A contribution of highest importance is to be looked for in this field sometime, however, as experimentation is carried to what seems to be its ultimate possibilities.

A valuable contribution in the field of teacher-selection has been made by Dr. Hagie,¹ of Western State College, Colorado. Dr. Hagie investigated the selective practices in seventeen teacher-training institutions. He discovered six rather well-defined methods of selection. These may be summarized as follows:

1. Eliminate those candidates who failed to get recommendations from high school principals and who failed to pass a physical examination. After such elimination the institution's quota is filled by choosing from candidates in order of scholastic standing.

2. High school teachers, principals, and supervisors recommend from their students a number only slightly exceeding the institution's quota. From this select group the administrative officers make final selections by use of all available data, in some cases including private interviews.

3. A method similar to the second but including a system of guidance throughout the high school years. This makes it possible to recruit the potentially most desirable teacher material and to discourage the undesirable from looking toward teaching as a profession.

4. The morally and physically unacceptable are eliminated by

¹ Hagie, C. E.—*Selective Admission to Teacher Preparation*, Leaflet No. 39. Washington: Office of Education, 1933, pp. 1-7.

evaluating all the data considered as bearing on the matter, including the impression gained from personal interview, psychological test scores, scholarship marks and interest, and activities of the candidates in high school. Final selection is made purely on a basis of attempting to get the candidates who will develop into the best teachers.

5. This method consists in eliminating the morally and physically unfit and then applying a formula to those who remain on the list. In the final selection 75 per cent of the score is on scholarship and 25 per cent on personality.

6. The total quota to be accepted by the teacher-training institutions is assigned among the various communities of the state on the basis of their probable needs for replacement purposes. Each community has the privilege of recommending high school graduates for preparation to teach, whom its school officials are willing to employ when they have finished their training. Thus responsibility for the selection of the quota is placed almost entirely upon the teacher-employing agencies.

In the conclusion of his study Dr. Hagie formulates the following recommendations:

1. Until such time as states find it possible to place all their problems of teacher preparation under a responsible head with authority to set up admission criteria and enforce standards, there will be no surer way of effecting the wise selection of candidates to enter teacher preparation than a state-wide, high-school guidance program sponsored by co-operative agreement between teacher-employing and teacher-preparing agencies. A state association of teachers college and public-school administrators, working toward this end, could set up acceptable criteria for evaluating teacher potentialities among high-school students and accomplish much in discouraging the undesirable from looking toward teaching. At the same time, it would be possible to recruit those of greatest potentialities, through well-organized vocational guidance and counseling. Such a plan would circumvent the blighting effect of legislation which has made other types of in-

telligent selection impossible, and could even be made, within limits, to regulate the numbers by suggesting quotas required to supply probable demand.

2. Research studies of teacher failure indicate that more emphasis than the present practice shows should be placed on the evaluation of character and citizenship qualities in the selection of students. To be of greatest value this evaluation of the student's potentialities should be made at least once during each year of high-school attendance by teachers and principals intimately acquainted with the student and his work and the cumulative records used in the final estimate. Analysis of the data gathered in the study showed that practically no attempt is made to evaluate such qualities in connection with the application of selective criteria. A complete set of personnel-evaluating criteria is proposed for use in rating high-school students as a regular part of the school's system. The form follows: ²

PERSONAL QUALITIES—RATING FORM ³

Put a check mark to indicate in what fifth of the school community this student ranks in each of the qualities listed in the chart on the following page.

Omitting the rating form for scholarship, health, and speech, as given by Dr. Hagie, his scale for rating character and citizenship is as follows: ⁴

Underscore the terms which best describe the student's classification under each of the following:

Character: Outstanding, above reproach, never questioned, sometimes indiscreet, poor reputation.

Attitudes toward law and constituted authority: Upholds, obeys, tolerates, violates, opposes.

Ideals: Outstanding, above the average, average, below average, low.

² *Op. cit.*, pp. 10-11.

³ *Op. cit.*, p. 12.

⁴ *Loc. cit.*

Attitude toward religion: Serious, conscientious, disinterested, makes light of, openly opposes.

The refinement of some or all of the processes suggested above should eventually improve greatly the quality of teachers being trained for the schools of our country.

<i>Quality</i>	<i>Upper 5th</i>	<i>2nd</i>	<i>3rd</i>	<i>4th</i>	<i>Lowest 5th</i>
Initiative					
Personal magnetism					
Self-confidence, resourcefulness					
Common sense, judgment, tact					
Leadership					
Co-operation					
Cheerfulness					
Adaptability					
Personal appearance, neatness					
Sociality, self-control					
Poise, bearing					
Voice					

The National Survey of the Education of Teachers carried on under the direction of the United States Commissioner of Education suggests the following program for the selection of students for teacher-training institutions:

A progressive program of selection, admission, elimination, and final recommendation for teaching should begin with matriculation and carry through to certification. The functioning of selective agencies may actually occur at any one of a number of stages of

college or precollege progress and with the use of several agencies such as:

1. A guidance program at the secondary level.
2. Admission standards using a single criterion or a battery of selective features.
3. Elimination of the scholastically weak during the first year or two.
4. Selective senior college admission to a school or college of education.
5. Qualifying examination in the teaching fields.
6. Requirement of a health certificate.
7. Withholding of recommendation because of negative character traits; strong backing of the best prospects.
8. Committee or group judgment of teaching personality and group or committee evaluation of teacher success.
9. General faculty recommendations.
10. Special ability tests—English, etc.
11. Final selection for recommendation by faculty.
12. Comprehensive examination on general education in all fields.
13. Restricted state selection of most fit to meet actual needs from all applicants from all institutions.

A real responsibility rests upon each teacher-preparing institution not alone to admit able students but to guide, direct and appraise constantly their growth as potential teachers of the type demanded for the public schools.

The teaching profession stands in need of able recruits. High school teachers and administrators in the field can render service by encouraging talented students who appear to possess teaching aptitude and personality to prepare themselves as teachers by seeking admission to some teacher-education institution.⁵

⁵ Rugg, Earl U.—"Teacher Education Curricula," *National Survey of the Education of Teachers*, Vol. III. Washington: U. S. Office of Education. Bulletin No. 10, 1933, pp. 29-30-31.

The statements so far made in regard to selecting students for entering the teaching profession have been equally applicable to teachers of every level and all types of schools. Adequate health, bodily vigor, mental ability, desirable social attitudes, high ideals, character, and personality are of vital importance as characteristics for all teachers. We may now consider the question, "Are there certain characteristics that the rural teacher should possess, supplemental to those that are desirable for all teachers?"

THE SELECTION OF RURAL TEACHERS

Rural schools have been taught in the past, very largely, by persons unable or unwilling to secure training sufficient to meet the requirements of towns and cities, and by the left-overs from teacher-training institutions who were unable to secure the more attractive positions. This has been due to the various factors discussed in Chapter V, associated with an unfavorable mental attitude toward the rural field of work that has grown up during the period of more rapid urban progress. But if the rural children of the United States are to have a fair chance in life, if through the agency of public education they are to be developed to the point of highest value to themselves and to society, teachers must be provided for rural schools who choose to work in the rural field because they enjoy rural life and believe in its possibilities to give as high a degree of satisfaction as is possible in any other type of community. Such teachers must be given adequate compensation, good working conditions, and assurance of a permanent tenure as a reward for a high type of service. This is a dream of the future, but one that is entirely possible of realization. Progress always results from the influence of those who "dream dreams and see visions." It is not only well to have a few seers of visions who realize these needs and possibilities, but every worker in the field of rural education should also have a

glimpse of the possibilities of rural life at its best and a knowledge of the first steps that must be taken to attain it.

Characteristics of Rural Teachers.—It is needless to say that the rural teacher should possess all of the general qualities desired for urban workers. In addition certain other characteristics are demanded by the peculiarities of rural life and needs. These peculiarities and needs are largely those which are associated with the differentiating features emphasized in the rural curriculum. They may be expressed as rural-mindedness; social leadership; nature knowledge and appreciation; an understanding of the essential problems involved in agricultural activities; and an ability to meet successfully the various problems in organization, management, and instruction found in the rural school. Each of these rural characteristics will be discussed under a separate head.

Rural-mindedness.—Some doubt the existence of such a characteristic as rural-mindedness, but long acquaintance with both urban and rural people has convinced the writer that there is a place for the word and the idea. The rural-minded person enjoys open spaces and stillness; association with nature; few, but intimate and closely personal human contacts; the odor of the soil, and the feel of it beneath his feet; growing crops; and domestic animals. They may be inborn, they may be the result of environmental influences, but whichever is the case, they greatly increase the ease and effectiveness with which the individual possessing them can work in a rural environment and with rural people. A noted educator, who had grown up in a good farming community, once remarked to the writer, "I cannot understand how you can say that you enjoy life in the country. To me there is nothing to enjoy about it." This man was honest in the statement quoted. It was a deep-seated attitude on his part and one that he doubtless kept to himself, but it was there and could not keep from limiting the effectiveness of any effort he might make

to influence rural people, or improve the conditions of rural life. Wherever possible, those teachers should be directed into some form of rural service, whose attitude of mind attracts them to things characteristically rural. Those who do not have this attitude of mind should not be sent into rural schools to gain experience necessary to admit them to town or city systems.

Fitness for social leadership.—The successful rural teacher inevitably becomes a member of the community in which she is employed. The same is not true of the city teacher. To city parents the teacher is practically unknown outside of the school-room. To rural parents the teacher is a factor in the life of the community, and she cannot escape the responsibility of this personal relationship with the community without being recreant to a duty. The teacher-training institutions should endeavor not only to seek out for rural service those students who enjoy this sense of personal responsibility for community welfare, but should attempt to develop it, where possible, on the part of those who will probably enter the rural field. Those who seem incapable of developing such an interest should not be recommended for rural employment.

Nature interest and understanding.—Rural teachers should have a genuine interest in, and appreciation for, nature. If they do not come to the training school with these characteristics, such characteristics should be developed before rural teaching is undertaken. As was pointed out in the chapters dealing with the rural curriculum, the nature environment of the rural child is of the greatest significance, both from the economic and the cultural point of view, and should be emphasized throughout the entire period of elementary and secondary school life. No teacher can lead children into a deeper and broader understanding of their nature environment, and a fuller appreciation of it, who is herself lacking in such understanding and appreciation.

Agricultural appreciation.—An appreciation for farm life and

farming as an occupation, like the nature attitude, sometimes exists as a result of home life and early schooling, but more frequently does not. Agricultural appreciation does not signify a training for agriculture as a vocation, but a general understanding of the agricultural problem and an appreciation for the fine elements in the life and occupation of a farmer. Though a large proportion of those enrolling in teachers' colleges come from farm homes and rural villages,⁶ this fact does not insure a favorable attitude toward farm life. Children are very susceptible to the unexpressed ideals and attitudes of their teachers, and the better the teacher, the more powerful are these factors in determining the responses of the pupil. For that reason an excellent teacher with a strongly unfavorable attitude toward farming as an occupation may become a very strong factor in the "skimming process" by means of which the finest part of rural childhood is removed from the rural community. Those interested in maintaining the quality of rural life should use every legitimate means of preventing this non-rural influence from entering the rural school by the very agency through which they are expecting to improve it. While, as has been said before, the rural school should not be made an agency for holding young people on the farm, it certainly should not be permitted to drive the best of them from it. A fair deal is all that the farm should ask, but it is not getting that so long as teachers who have little understanding of farm life and the essential features of rural environment, and less sympathy with them, are sent from training schools to teach farm children. A teacher's attitude in one generation may mean a community depleted of its potential leadership in the next.

⁶ Nearly one-half of the teachers-college group have lived on farms and seven-eighths have lived in communities with a population of less than one thousand. Evenden, Edward S., Gamble, Guy C., and Blue, H. G.—*National Survey of Education of Teachers*, Vol. II. Washington: U. S. Office of Education, Bulletin No. 10, 1933, p. 137.

Rural Teaching Attitudes and Abilities.—The peculiarities of the rural school situation make certain demands upon the teacher which are not made in other teaching positions. The rural teacher is frequently called upon to handle a number of grades at the same time in the same room. It usually requires a greater amount of independence and initiative than does the city situation, because there will often be neither principal nor supervisor to depend upon for advice, nor other teachers to provide sympathy and suggestions. The daily program will be crowded too much to permit effective teaching unless the teacher is wise enough to use some of the approved methods for relieving the situation. The rural environment will continually project materials into the school that should be admitted and organized into the routine program. If such environmental material is neglected, the effectiveness of rural teaching will be greatly reduced. It is these differences in the rural school situation that demand a special type of training, especially in the professional subjects offered by the teacher-training institutions to students who are preparing for rural service.

TRAINING FOR RURAL SCHOOL WORK

The preceding discussion has indicated the need for certain types of modification in the program of training for rural teachers. It goes without saying that the central core of the training given to the urban and rural groups should be identical for all teachers working on a given level, but this does not lessen the need for modification to meet the specific needs. There has been much discussion in regard to the need for specific training for rural school service, with good arguments on either side, but the present trend of thought seems to favor it. The weight of argument drawn from current practice is strongly for special rural training as shown by the fact that 83 per cent of the teacher-training institutions in the United States offer courses in rural

education or otherwise differentiate the work for prospective rural teachers.⁷ These institutions do not all have special rural departments, however. Further evidence comes from the judgment of a jury including seventy-six presidents of teachers' colleges, sixty-six directors of rural training in teacher-training institutions and one hundred county school superintendents.⁸ The judgment of this group, as obtained by a questionnaire, was strongly in favor of specialized courses for the training of rural teachers. All the rural training directors approved it, while only five presidents and two county superintendents disapproved—a favoring vote of 97 per cent of the group. The chief reasons offered by these jurors for their judgment in favor of specialized training for rural teachers were:

1. The physical, social, and economic differences between rural and city life.
2. The differences in the experiences of urban and rural children.
3. The different organizations, handicaps, and opportunities of rural schools, involving greater responsibility and demands upon the rural teacher.
4. The general retardation of rural children, and the neglect of rural schools.

These statements agree quite fully with the curricular differentiation for rural schools as suggested in Chapter XII and with the four characteristics which rural teachers should possess, as given earlier in this chapter.

There is, however, one objection that is made to any form of specific rural training. This is that it is impossible to segregate those students in the teacher-training institutions who will go into rural service from those who will work in urban schools.

⁷ Robinson, W. M.—"The Problem of Differentiating Rural Teacher Preparation," *N.E.A. Proceedings*, 66: 485, 1928.

⁸ Carney, Mabel—"The Status of Rural Teachers," *Thirtieth Year Book, N.S.S.E.*, Part I, p. 166.

Such objection has been well founded in the past, but there is no reason why it should continue to be. One of the major problems involved in the training of teachers is that of aiding prospective teachers in determining the general field and specific type of educational work in which they are most deeply interested and for which there is the greatest demand. The selection of these urban and rural groups is merely one phase of this professional guidance. Since there seems to be ample justification for a difference in the training given to rural and to urban teachers, a technique for selecting those fitted for each group should be ultimately achieved. Up to the present time the higher salaries, longer terms, and better working and living conditions found in cities have attracted the best teachers into urban service. This has made real selection impossible. There is a general movement, however, toward equality of opportunity to all children regardless of the economic status of parents or community, and as this ideal is more fully realized the conditions which tend to attract the best teachers to the city will be removed. Many teachers would prefer rural teaching if the handicaps that have been attached to it were removed. There will probably be little difficulty in differentiating the rural group in training schools when there ceases to be financial penalty imposed upon those who are engaged in the rural school work.

Assuming it as proven that where possible a certain amount of differentiation in the training of rural teachers is desirable, and that it is becoming more possible as time passes to make a fairly accurate separation of the urban from the rural group, a definite consideration of the desirable features of a rural training course will be considered. In providing special courses every effort should be made to bring the number of differences to an absolute minimum. Identity in training is desirable, except as there are shown to be definite and important conditions that demand differences. With this principle in mind, an effort will be made

to present only those modifications in training which seem to be fully justified by rural conditions and needs.

COURSE MODIFICATIONS FOR TRAINING RURAL TEACHERS

Two types of course modification for the training of rural teachers seem to be justified by the peculiar needs and conditions that have been discussed above. These are the modifications of the non-professional and the professional courses.

Non-Professional Modifications.—The subject matter courses given in teachers' colleges should be as thorough and as broad as those given in liberal arts colleges, but with some degree of "professionalization." Such a professional slant should emphasize local applications of the general principles involved and child interests which could be utilized in developing satisfactory learning activities.

Social sciences.—The subjects included in the term "social science" are especially important for rural teachers because of the intimate relation the rural school holds to the social, economic, and governmental problems of the rural community. City life and social organizations are so highly specialized, so complex, that it is difficult for the teacher to feel a vital concern for them. The same is not true of the rural community. Here the teacher can and should bring elementary pupils to feel a vital relationship to matters of general community interest.

Basic courses in history, sociology, economics, and geography should be identical for all prospective teachers, but those who will work in the rural field need to have emphasis placed upon certain matters which are not of so much importance to urban teachers. They should have such features stressed as: county government; the town, township, or civil district as a civic unit; the rural village and its tributary area; the school organization and support; farm co-operatives and other farm problems; and community organizations. Some institutions offer an orienta-

tion course in social science during the freshman or sophomore year which might be made to meet the specific needs of rural as well as urban teachers, but in order to do that the instructor would probably have to permit, or require, those looking to the rural field to make certain special studies not required of all in order to cover the topics listed above in a sufficiently thorough manner. It would probably be better, if the rural group could be handled in a separate class, to offer at least one quarter of work in a rural orientation course in which the topics listed, and others that might be of special importance in the area served, could be treated with a fair degree of thoroughness. Such a course would probably be of highest value if it was developed from a study of the rural communities represented by the class, with emphasis placed upon the technique of carrying on such studies. The writer's experience with thousands of rural teachers from a number of states warrants the statement that the most startling deficiency they possess is the absence of anything like an adequate understanding of their local community, its resources, difficulties, problems, and possibilities. It is for this reason that a course for rural teachers which will deal with these local problems, solely and specifically, is advocated.

During the junior and senior years, prospective rural teachers should take one course in rural sociology and one in rural economics, so organized as to duplicate as little as possible the work given in the rural orientation course. These courses are fairly well standardized and may safely follow the general organization of subject matter as found in good texts in these fields. The relations which the federal government is assuming toward the control of industry, trade, commerce, and agriculture are so important, and so fraught with possibilities both for good and evil, that every course in social science should study its further development as a current event study.

Courses in political, economic, and physical geography given

to prospective rural teachers should stress those features that will give the fullest understanding of rural problems. Every year brings increased competition to American farmers from distant regions, and in consequence the future farmers of our country should have a better knowledge of world conditions that affect agricultural markets than the farmers of former generations needed. In order that they may get such knowledge through the school, teachers must be trained in the ability to give it to them.

The social science work as suggested above should result in the development of an ability for leadership in the rural community which it is vitally important that the rural teacher have. Such courses as those suggested meet the demands placed upon the rural teacher as contained in points one and three of Miss Carney's list, and also those required for effective social leadership, one of the four characteristics given above as essential to the best service on the part of the rural teacher.

Natural science.—Science and nature information should constitute a most important part of the training given to rural teachers because it is so important a factor in the life of the rural people. The "physical differences," and the "differences in the experiences," as mentioned in Miss Carney's study quoted above, relative to urban and rural children, are very largely the result of the rural child's daily contact with his nature environment and the intimate connection between scientific laws and the successful pursuit of agriculture as a vocation. The urban child sees the end-products of science in whirring machines, in railway trains and trolley cars rushing to and fro, and in gigantic electrical lighting displays. The farm child sees nature, science, and power in their more elemental and direct form. Each should have the science that lies back of these sense-impressions explained in the elementary and high school. Physical forces are important factors in the life of the rural child, but his biological environment, with its rich and varied interests, and its intimate

relation to farm life, is more important and more difficult to understand. Because of these differences in the science contacts of urban and rural children, there should be a difference in the courses offered to the teachers of the two groups. It would be well if all teachers knew all that any group of children needs to be taught, but that is impossible so long as we employ the general method of dividing the various departments of science into separate courses, with a year of study counted as necessary for even an introductory knowledge of each. The adult organizes his science into the departments of botany, zoology, chemistry, etc., but the child does not. The great difficulty experienced in this field of teaching is that the teacher thinks in terms of these formal departments, while the child experiences and is interested in his environment as a whole. During an hour in the out-of-doors he may have his interest aroused in every department of science by a variety of sense-contacts with it. The result of these broad experiences of the child, and the narrow, formal training of the teacher, is that too often the teachers side-step the matter entirely and stay safely within the text-walled fields of tradition.

The difficulties which the elementary teacher faces in nature teaching are forcibly impressed by a brief examination of a good course in nature study and elementary science such as is provided by New Jersey⁹ for the elementary teachers of that state. Four large sheets present in chart form the fundamental concepts to be developed by means of the course and the study units suggested. These cover the fields of astronomy and meteorology; biology, geology, and physiography; chemistry and physics. The materials are to be distributed through the grades from the first through the eighth. The manual which these charts introduce is a volume of 332 pages. It is quite evident that the formal courses in science, as they are offered in the great majority of teacher-

⁹ *The Teaching of Nature Study and Elementary Science*, State of New Jersey, Department of Public Instruction, Trenton, 1929.

training institutions, do not fit teachers to handle this type of work. It seems, therefore, that there must be provided courses in science that meet this need of teachers for an introduction to the entire world of nature and science. Because of the vastness of the field, there will probably be an economy in time and effort if a course is provided for prospective rural teachers that stresses the biological side of science, and approaches it from the farm-life and open-country point of view. For city teachers the stress should be upon the physical sciences, with biology made largely a matter of health, and the interpretation of parks, museums, and vacation-time experiences. In institutions enrolling small total numbers, or small numbers in either the rural or the urban group, doubtless only one course should be given, but cases where there can be found sections of suitable size in each group, the differentiated courses will give the best results.

It is often claimed that rural children are less in need of nature and science instruction in the elementary and secondary schools than are city children because the former have so much of it in their out-of-school life. This is a serious fallacy. Rural children do see much nature, but they do not comprehend what is seen. They come to school with a large body of inaccurate, and in large measure meaningless, experiences. It is for the trained teacher to bring order and meaning out of this chaos and send the children back into their environment with a clearer purpose and better technique of observation. In no way can a sound basis for clear thinking be laid more effectively, nor a greater joy be given to rural life, than by right instruction in this rich field of nature and science. The city child needs this form of work to supplement the meagerness of his out-of-school environment. The rural child needs it to help him comprehend and appreciate its vastness and beauty.

The discussion of social and natural science as given above does not undertake to suggest in detail how courses for teachers

in these two fields should be organized, nor does it give criteria for the selection of material to be used. That is a problem for the subject-matter teacher who is sensitive to the teaching aims of his students, to work out in terms of value to the prospective teacher rather than on the basis of formal scientific principles. Those being taught in training schools should be given thorough work in each of these fields of knowledge, but in organizing courses and in directing the learning process the college instructor should never lose sight of the ultimate purpose in view in the mind of the learner. A quarter of work in biology devoted to the anatomy of the frog may be justifiable when given to a pre-medical student or to one preparing for anatomical research, but in the opinion of the author it cannot be justified, by any process of thinking, as a factor in the training of elementary or secondary teachers.

Members of the departments of social and natural science in teachers' colleges have a task before them which is in serious need of a courageous and systematic attack. It is the task of organizing courses that are thoroughly respectable from the point of view of scholarship in the given fields, and at the same time fitted to meet the needs of those who are preparing to teach children during the first twelve years of formal education.

English and literature.—There is doubtless no need for rural differentiation in teacher-training courses in language and literature, but instructors in this subject should keep certain rural school conditions in mind when planning required courses for rural teachers. The conditions that demand this are: first, that rural children, on the average, come to school with more serious language defects than do city children; second, that there is much poorer library service available for the use of the rural teacher than for the use of the city teacher; third, that rural schools are more poorly supplied with well-selected supplementary books than are city schools; and fourth, there is rarely a

trained librarian in rural schools to care for and to build up the school library. Because of these deficiencies, teachers who expect to work in the rural field should have special strength in the following lines: (1) command of oral English and experience in directing such activities as will aid pupils in forming good speech habits; (2) knowledge and appreciation of children's literature; (3) interest in and knowledge concerning the development of a school library such as will insure an adequate supply of well-selected books.

Agriculture.—This subject would have been discussed under the head of natural science had it not been that the form of agriculture which should be required of all rural teachers is not really a science course, but rather a course dealing with agriculture as a manner of life, closely associated with production and distribution of products and the business management of a farm. It is not necessary that every rural teacher know the details of maintaining the fertility of soils, of growing plants, or of breeding and caring for domestic animals. It would seem to be most desirable, however, for all teachers working in rural communities to have a clear, general understanding of the essential problems involved in farm life and occupations, and an appreciation for farming as a basic industry in society. Much of the matter demanded for the accomplishment of the end just stated will be gained through the various courses suggested under social and natural sciences. It may be necessary to organize a special course to fill in the gaps and insure that the rural teacher goes into her field, not only with knowledge concerning farming and farm life, but with attitudes and ideals that will have a constructive influence throughout the community where she works.

Music and art.—The importance of these two neglected subjects was stressed in the discussion of the rural curriculum, but there is need, at this point, for emphasis on their importance in the rural training program.

City teachers usually have supervisors who visit their rooms and direct the work in these two fields; rural teachers rarely do. It is vitally important, therefore, that rural teachers not only be well-grounded in the fundamentals of each subject, but that they be given training in the selection of material and instruction and in the technique of promoting an effective program in art and music in their schools. This is especially important because they will be required to work under difficulties, without aid, and with poor facilities to carry out the program. The old-time "singing school" has practically died out in most sections and nothing has taken its place. Phonographs and radios are quite common in country homes, but too often the records available are of poor quality, and frequently the radio is never tuned in upon really worth-while musical programs because of the undeveloped tastes of those who own the instrument. Whether personally skilled in music or not, every rural teacher should have the desire and the ability to promote musical appreciation and production in school and community.

The basic elements of art instruction for rural teachers should be the same as that given to city teachers, but there should be a very definite effort made to develop ability to utilize for expressive work materials that are found in the rural environment, and to train in appreciation for distinctively rural beauty. Plant and animal life afford a rich source of aesthetic material in color, form, and movement, which the teacher who is properly trained can use to advantage. The same is true of the varied phases of the child's physical environment, including rocks and soil, streams and ponds, clouds, and frost and dew. In no way can the teacher-training institution contribute in a more effective manner to rural prosperity, happiness, contentment, and culture than by sending teachers into the rural schools who have ability to develop an interest in, and an enthusiasm for, these refining influences of music and art. Administrators of such institutions

should see to it that the instructors in music and art are given an opportunity to develop in prospective teachers such attitudes and abilities as are demanded in order to achieve successfully the results outlined.

SUMMARY

During recent years there has been an increasing interest manifested in the selection of those who are to be trained for the teaching profession. A number of methods have been employed in attempting this process, the more important of which have been personal recommendations, physical examinations, high school achievements, mental tests, teaching aptitude tests, and early college achievements. Any method is probably better than none, but as yet no one method has been found to be entirely satisfactory.

Special training for rural teachers is quite generally approved by leaders in the teacher-training field. To make special training for the rural field most valuable, those to be trained should possess certain interests, attitudes, and abilities. Chief of these are: rural-mindedness, fitness for social leadership, nature interest, and agricultural appreciation. Special training for rural work at the present time is made difficult by the low salaries and poor teaching conditions so often found in rural communities. As these conditions are changed it will become easier to secure groups in teacher-training institutions who are definitely planning for work in the rural field. There should be certain subject matter modifications for rural training. These are demanded chiefly to meet specific conditions that exist in rural communities, such as occupational peculiarities, social conditions of a distinctively rural type, and the intimate association of children with nature. The modifications may be made by having the rural students in separate classes, or by the instructor's planning variations within the general group to meet the needs of the students.

CHAPTER XV

THE SELECTION AND TRAINING OF RURAL TEACHERS (CONT.)

PROFESSIONAL COURSE MODIFICATIONS FOR RURAL TEACHERS

The psychological principles involved in the learning process, the fundamentals of method in teaching, the basic principles of school organization, discipline and management are identical in rural and urban schools. So, too, are the ultimate outcomes for which each type of school is working. All are training for citizenship in a common country; all are aiding children to grow into adults with a consciousness of the fundamental unity of interests existing between the citizens of our common nation. Such differences as exist in the work of teaching in country and city arise from differences in school organization and control, in the manner of approach to the learning situation and in the local materials to be utilized in teaching. The first grows out of the small number of pupils brought together into a single school unit. The second and third result from the differences in the out-of-school experiences and interests of urban and rural children, and are in harmony with the second reason given for differentiated rural training on page 251.

School and Classroom Organization and Control.—There are certain things which every prospective rural teacher should understand quite thoroughly before entering upon the work of teaching. The more important of these are: the problems involved in the organization and management of a multiple-grade

room; the characteristic problems in discipline and control which are met with in the rural school; and the necessity for initiative and self-confidence in securing and in caring for teaching equipment and materials.

Since roughly 150,000 teachers in rural communities are still employed in one-teacher schools, this type of school organization remains a major problem for those interested in improving rural education. These schools usually serve children of eight grades in the North, and seven in the South, though in sections where partial consolidation has been developed they may only enroll from four to six grades. In any case, this many-grade situation involves a very great difficulty in so organizing the work as to enable the teacher to do the fullest possible measure of justice to the pupils concerned. Many students of education contend that it is impossible for any teacher to serve efficiently children of six to eight grades in a single room, but the writer does not share this opinion. This problem has been treated in detail in the chapter dealing with the organization of the multiple-grade school, and will only be touched upon here in its relation to the problem of teacher-training.

The courses in school organization and management offered by teacher-training institutions to prospective rural teachers should present fully and clearly the principles involved in correlation of subjects in teaching; in alternation of subjects by days, weeks, months, or unit topics; in entire grade-alternation by years; in grade-combination for the study of large interest units and in directed study as a means of economizing time. All of these principles of time-economy should be applied in working out a daily program that will make good teaching possible even in one-teacher schools that enroll all eight grades of the elementary school.

The general principles that apply to the making of a program for a one-teacher school will also apply to program making for

a two-teacher school or for any room that serves two or more grades. In such schools it is often well to form two or more sections of each grade, thus creating a situation very similar to that found in the one-teacher school.

The statement that all teachers preparing for the rural field should have specific training in the problems of organization and management of the multiple-grade schoolroom is justified upon the ground that any of them may be assigned to the one-teacher schools, regardless of what their plans may have been. There is also a tendency to increase the salaries of teachers employed in one-teacher schools and to improve the teaching conditions to such a degree that many good teachers go to these schools of their own choice. This will be true, especially, if the training classes instruct in methods which will make good teaching possible in the one-teacher school. The statement is further warranted by the fact that the rural group in any administrative unit should understand the teaching problems and possibilities of the entire teaching staff, not merely those peculiar to their own positions. The teachers in the large schools should be fully aware of the conditions under which their associates work in other types of schools in order to facilitate progress toward general objectives and achievements by all. Teachers in small industrial and mining villages also need the type of training in school organization that is required for the small-unit rural school, because of the fact that their situations are often quite similar to those of the rural teacher.

While it is true that the basic principles of discipline and school control are essentially the same in all schools, there are certain specific differences that exist in rural communities which must be recognized by the rural teacher. Failure to give these factors due consideration often results in difficulties that could have been avoided by proper attention to them.

The first of these is the home-associations that result in dis-

ciplinary problems. Forty children in a city schoolroom may have little knowledge of each other out of school, and in many cases their families are absolute strangers. This is not the case in the smaller rural schools where no transportation is provided. Out-of-school association is frequent, and many of the disciplinary difficulties that arise in the school are merely the aftermath of family misunderstandings, jealousies, and rivalries. This condition creates the demand that the rural teacher become acquainted with neighborhood life and be strong enough and tactful enough to use the knowledge gathered in a helpful manner. The seating of pupils in the schoolroom, play activities, community programs, and other activities involving pupil and community co-operation are often seriously complicated by such neighborhood influences. An understanding of these influences may be put to good account, however, by making it easier to bring the school group into a desirable state of social unity.

A second matter that the rural teacher meets in a much more serious manner than does the city teacher is that of conforming to community standards of conduct. A city teacher can very largely "live her own life," but such is not the case with the rural teacher. She is a member of the community, known personally to the people of her district, and must conform in large measure not only to the more important customs of the community but also to its prejudices. Dancing and card-playing are examples—for in many communities the moral standing of a teacher will be seriously affected by disregarding local ideals or prejudices in regard to these and similar matters.

Present conditions demand that the rural teacher, especially in the one-teacher school, should possess a large degree of self-confidence and initiative. These qualities are in a measure in-born, though it is doubtless possible to develop them in many persons who have never manifested them to any marked degree. Proper class instruction may do much to stimulate their growth,

but they will be developed to best advantage through the influence of wisely directed observation, participation and directed teaching in well-organized rural training units of different types. The instructor in classes dealing with classroom organization and control will fall far short of the ideal, however, if he does not lay the foundation for right professional attitudes and ideals and give to every prospective teacher the spirit that sees in every difficulty a challenge to effort.

Principles and Methods in Teaching.—The skilful teacher in any teaching situation seeks to ascertain the interests and experiences of the children which can be utilized to best advantage as an approach to the desired learning situation. Ability to so locate interests which are related to the objectives to be attained by the teacher is a matter of primary importance for any teacher in any school. The method of instruction which definitely undertakes to develop this ability is striving toward the attainment of a major objective. There will be little difference in the final results obtained in equally well-taught groups in city or country, but there will be a great difference in the manner of approach, the child-experiences utilized in the process, and the illustrative materials used. This does not demand a great difference in training but a most essential one. As suggested in regard to management and control, this differentiation can be provided to best advantage in classes where rural and urban teachers are separated, but where this cannot be done, the instructor must recognize the different needs of the two groups and devise a way to meet them in the same class. This matter of utilizing interests, experiences, and materials originating in, and obtained from, the out-of-school life of the child is of fundamental importance. The ability to make such connections with life is a matter which must be developed in the training institution if a functional education is to result from the school life of the child.

Observation Participation and Directed Teaching.—In the demonstration and practice schools is to be found the real point where rural differentiation in training is made effective. Discussion of principles and methods to be employed in organizing, administering and instructing the multiple-grade schoolroom may bear fruit in actual practice later on, but most teachers-in-training need to see in successful action the process which is to be employed later on. So long as the observer sees only the one-grade room in operation, the multiple-grade room remains a theory and the method observed is not apt to function in it under her direction. If she has had any past experience, either as pupil or teacher, involving the multiple-grade room, her school is quite likely to be of that antiquated type which she has experienced and not like the one she has observed. The old type will be perpetuated so long as teachers-in-training are not shown the various types of better schools, taught by methods which will secure the highest efficiency. Experience is more potent than theory in shaping conduct, and most teachers teach as they have been taught unless better theories are supplemented by clear and specific example and actual practice properly supervised.

The rural training school has become an important factor in connection with many teachers' colleges and normal schools. At first it was a "model rural school" maintained upon, or near, the campus of the college, such as the school established on the campus of the Kirksville, Missouri, Teachers College some years ago and made famous by the work of Mrs. Harvey. Miss Hattie Brown also became known for the excellent work of this kind which she did on the campus of the college at Rockhill, South Carolina. It was soon found, however, that these campus rural schools could not demonstrate as fully as was desirable the real problems of the rural school such as were met in its natural setting. Mrs. Harvey moved to the open country in order to secure normal rural conditions in which to work. Here she built up a

splendid demonstration of what it is possible for a teacher of superior ability and clear vision to accomplish for the education of a rural community.

At the present time the off-campus training schools have become a characteristic feature of the work of institutions which feel that they must serve in a specific manner the rural communities which cannot maintain standard multiple-teacher schools with one-grade or two-grade rooms. The ideal facilities for this type of training seem to include at least three types: the one-teacher school, the two-to-four-teacher school, and the large consolidated school which has passed the multiple-grade-room stage in rural school development. In most cases this larger type includes a full four-year high school organization in addition to the elementary school, an arrangement frequently found in the better rural communities.

The teacher-in-training, like the physician-in-training, is best fitted for the work that she is to do by being placed in situations while in training that are most nearly identical with those which she will face in life. There are three quite distinct means by which the teacher gains in teaching power from the training schools. These are: (1) the observation of artistic teaching as done by a skilled demonstration teacher; (2) participative activities, including room supervision, aiding individual pupils, preparing and distributing materials, and instructing small groups of children; (3) directed teaching where entire responsibility is assumed for the teaching of a class or a room for a part of a day, an entire day, or a number of days. The first two of these steps are preparatory, the third is the final objective for which the training school is established. The teaching of a single class, or a series of classes covering one or more hours, is not enough to give the training that is needed, however. No teacher should be placed in charge of a school until she has actually been responsible for the entire school routine for a series of days, per-

haps a number of weeks, under the supervision of a trained supervising teacher.

It is at this point that the teacher-in-training, the "teaching interne" so to speak, develops real power to perform the task for which she is being trained, if such power is ever to develop. And it is here that the most important function of the rural training unit is performed. Each teacher who is to go into any phase of rural work should spend a period of time during which she is wholly responsible for the control of, and the learning that goes on in a room. This should include as much as an entire week in a one-teacher school, with a longer period in a single-grade or multiple-grade room of a larger school. During this period of rural teaching, the student teacher should live in the community which she serves, and participate in all school and community activities. This type of training will demand quite an elaborate system of off-campus training units, but society cannot spend money more wisely than in giving prospective teachers practice under supervision rather than send them out for un-supervised practice upon children. Such practice may permanently and seriously harm those being taught, and at the same time set the teacher in wrong methods rather than train her in good ones.

It may be profitable at this point to permit the reader to compare the course-modifications for the preparation of rural teachers as proposed above with those suggested by Miss Carney¹ in her questionnaire, as quoted on page 251 of this volume, and for which the votes of the group consulted was, "highly favorable." Her suggestions were:

1. One course in nature study and agriculture, or elementary science, to explain the physical environment of country life. Thé agri-

¹ Carney, Mabel—"The Status of Rural Teachers," *Thirtieth Year Book, N.S.S.E.*, Part I. Bloomington, Ill.: Public School Publishing Company, p. 167.

culture presented here is to stress the appreciation aspects of farming, not the vocational.

2. A course in rural sociology and economics (or rural life problems) to explain the social and economic aspects of rural living. The chief purposes of this course will be to develop appreciation and to define the function and relationships of the teacher and the school to rural society.

3. A course in rural education (various titles are used) to consider the necessary adaptations of the educative process to rural school conditions and the farm child's experiences. This course should begin with an introductory survey of the significance, conditions, and needs of rural schools throughout both the nation and the local state; then include a study of the desirable adaptations in curriculum, technique and method, organization and management, community relations, and some phases of rural school administration and supervision.

4. Some special practice teaching in typical rural schools under good supervision.

5. Membership in a Rural Life Club during the period of training. This experience will afford training in the social and educational leadership, but should not mean exclusion from other student organizations.

It will be noted that these proposals are in general harmony with those which are suggested in this chapter, though not so extensive. The greatest difference is in the importance attached to the rural training school as an agency in developing rural teachers. In order that this difference may be supported by the evidence of recent developments along this line, a number of statements follow as to what use certain teachers' colleges in various parts of the United States are making of off-campus training schools.

State Teachers College, Kalamazoo, Michigan.—The Western State Teachers College has one of the best systems of rural training units to be found in the United States. This system,

to quote from the catalog of the institution, includes: "A wide range of typical schools—a one-room rural school, a consolidated school, a township unit school, a large village school, and a city graded school and high school on the campus—thus approximating the types of schools students will expect to work in after graduation." The catalog further describes the rural training schools as follows:

The Hurd One-Teacher Rural School—is housed in a new building equipped with electric lights, running water, an extra room for practice teaching, and a basement community room with stage, which may be used for indoor play.

The Paw Paw Large Village School—is one of the best of its kind. Western State Teachers College and the Paw Paw Board of Education aim to make this school a progressive one in every particular. All elementary grades, junior and senior high schools, and special departments are included, and the best types of modern equipment are exemplified. There are at present twenty-eight faculty members.

The Portage Center Consolidated School—a sixteen teacher school, includes kindergarten, all the elementary grades and a high school. The new building is especially constructed both to meet the needs of the local community and to extend the practice teaching facilities of the Teachers College into this type of situation.

The Richland Township Unit School—a fifteen teacher school, has a building and facilities similar to those of the Portage school above described. It is organized on the six-six plan.

For each of the off-campus training schools the buildings and material equipment are supplied by the local community; but the faculties are employed and the schools administered by the Teachers College.²

Of the sixty-four persons listed on the faculties of these rural training schools, thirty-four hold master's degrees; twenty-seven hold bachelor's degrees; and only three have no degrees. In

² Catalog of Western State Teachers College, Kalamazoo, Michigan, 1934.

addition to the facilities described above, the college has six affiliated one-teacher schools which serve as laboratories for junior and senior students in advanced courses of rural education. Four courses of four quarter hours each are offered in practice teaching. Three courses are required for those securing the life certificate. Students doing practice teaching in the Paw Paw or the Richland schools are required to spend a half day at a time in practice work. The Paw Paw school is located about twenty miles from the college. The Richland school about half that distance.

South Georgia Teachers College.—The South Georgia Teachers College at Collegeboro has an interesting method of providing practice for prospective rural teachers. The college has arranged for the use of twenty-six one-teacher rural schools in the territory adjacent, for training purposes. President Pittman says of this service:

We have a full-time supervising teacher who devotes her time to the supervision of the student teachers who are teaching in a typical school situation instead of in a practice school on the campus. The regular teachers who are on leave of absence receive their full salary during their absence. The student teachers who take their place are allowed fifty dollars for the three months. This is provided from a special fund made available for that purpose and serves to assist them in paying their living expenses. Student teachers get credit for two courses during the time they are doing this work.⁸

State Teachers College, East Radford, Virginia.—This college maintains an elementary and secondary rural training school some miles distant from the campus. It is a consolidated school located in a small village. There are 214 elementary and 84 secondary pupils enrolled in this training unit. Students of the college are transported to the off-campus training school

⁸ Pittman, Marvin S.—Personal letter to the author, March, 1935.

by bus and remain throughout the day, teaching in the various rooms. They are under the direction of trained supervisors holding master's degrees. The students are thus brought directly into contact with problems which are unique to rural people and schools, while they are associated with those especially trained to assist in their solution.

In addition to the specific service rendered to rural education through the training unit described above, East Radford is doing a fine work in certain counties by means of in-service-classes in directed teaching. The following report of this work was made by Miss Helen Einstein, of the East Radford State Teachers College. The work was done in Lee County, one of the extreme western counties of the state. Twenty-five teachers from eighteen different schools were enrolled for the course. Four of the schools represented were one-teacher schools. Miss Einstein holds a bachelor's degree from the East Radford College, and is a regular member of the faculty of that institution, regularly assigned to In-Service instruction. She says of her work as done in the field:

IN-SERVICE TRAINING OF RURAL TEACHERS IN VIRGINIA

As far as is practicable, the content of the In-Service course in Supervised Teaching is the same as the required course in Supervised Teaching in the Teachers College. The teachers who take this course have full teaching responsibility. They are held accountable by the Supervising Teacher for the entire room situation. The Practice Teaching requirements, however, are related definitely to the following general content:

First, the student teacher is required to keep accurate plans and records of all teaching acts related to the two subjects of her daily schedule, or to any activity unit of work she might be carrying on, and into which she is incorporating at least two subjects. The subjects to be considered as practice teaching experience are determined in conference between the student teacher and supervisor.

Second, the student teacher is required to teach these chosen practice subjects under the supervision of the supervisor. The supervisor visits the student teacher frequently to observe her work and confer with her in regard to the work in those subjects upon which she is being judged, and the general work of the school.

Third, the student teacher arranges for conferences with the supervisor for the discussion of problems that arise in the special subjects she is teaching, the unit study she is carrying on, or other matters concerned with the successful conduct of the school. These conferences are usually arranged for the time of the supervisor's regular visits, though sometimes they are provided for at other times convenient for both persons concerned.

Fourth, all of the student teachers of a given section hold group meetings each month under the leadership of the supervisor. This meeting is usually from two to three hours in length, and as a rule on Saturday. In preparation for these meetings the student teachers do professional reading, make reports, and contribute to the group discussion.

Fifth, at the end of the school term each student teacher gives the supervisor a full report of her work, a copy of school records, lesson plans which she has used, a résumé of the professional reading, and stands an examination in practical teaching and educational theory.

The student teacher selects two subjects upon which she is to be judged for a given period, and makes lesson plans for each subject each day. This plan includes:

1. A statement of what the lesson is to be.
2. Statement of the situation which creates the need for learning.
3. What the children may do in order to bring about the desired learning.
4. What the teacher may do to aid in the learning.
5. What has been learned during the lesson.
6. Assignment for future learning.

The supervisor reads these lesson plans when she visits the school, discusses them with the teacher, and makes suggestions for improve-

ment. At the conclusion of four to six weeks' work on two special subjects, two new subjects are selected for special study and supervision. In this way all of the school subjects receive special attention during the year. Lesson plans are made from day to day, since one lesson naturally grows out of a preceding one.

Each student teacher plans and develops one unit of work some time during the school year.

The titles of a number of units that are being taught follow:

Indians	Sugar
Dutch	Coal
Japanese	Clothing
Trees	Lee County History
Birds	Transportation
Farm Life	Our County Courthouse
Pets	Our Post Office
Weather	Our Library

The supervisor visits each student teacher at least twice a month for a period of from two to three hours. This time spent in the classroom is devoted to observation, the reading of daily lesson plans, a conference with the student teacher, and often to the teaching of certain lessons by the supervisor. At the time of the visit the student teacher tries to arrange her schedule so that the supervisor may observe work in the subjects on which daily lesson plans are being made.

GROUP CONFERENCES

The student teachers in the county are divided into two groups for the work that is done in Saturday group conferences.

The following topics indicate some of the discussions in which the student teachers have engaged:

1. Supplementary Materials for an Enriched Curriculum and How They May Be Obtained.
2. Units of Work (their meaning).
3. Steps in or Parts of a Unit of Work.
4. Criteria for Judging a Unit of Work.

5. How to Provide Time in the Daily Schedule for Developing a Unit of Work.
6. How to Write Up a Unit of Work.
7. Community Resources for Educative Activity in Lee County.
8. Professional Magazines.
9. Teaching Excellences and Errors.
10. Contemporary American Educators and Their Contributions.

At the first conference held in September the teachers are requested to write a statement of six to ten educational principles by which they are to be guided in their teaching. At the conclusion of the work, they will give five concrete illustrations to show the functioning of each principle in the learning process as discovered in their actual work with the children.

Each student teacher reads and discusses in conference at least six standard books on the teaching of elementary school subjects. The supervisor has about fifty professional books. The selection of books from this collection is left to the judgment of the student teacher.⁴

SUMMARY

Such modifications as are needed in courses for the training of rural teachers result from peculiarities in school organization and control, in the manner of approach to the learning situation, and in the local materials to be utilized in teaching.

The multiple-grade room so frequently found in rural communities presents the most marked peculiarity in rural school organization. By theory, observation, and practice the prospective rural teacher should become able to meet this situation successfully. Stress should be placed upon the value of correlation, topic and subject alternation, grade alternation, unit organization, and supervised study as means of meeting the difficulties of the multiple-grade room.

There are problems of control in rural schools that are not

⁴ Einstein, Helen—Special report prepared for the author, 1934.

found in city schools, growing out of the personal relationships existing between families. These matters are inevitably brought to the school and must be reckoned with in rural school discipline.

Methods of teaching are essentially the same in rural and urban schools, but the interest approach and illustrative material are markedly different. Students who are being prepared for rural work should be trained thoroughly in these two elements of good method. This type of course modification is more a matter of knowing than of method, but it is necessary that the method instructor aid students in organizing their knowledge of rural life and the interests and experiences of pupils in terms of teaching techniques.

The most important difference in professional training should be in the conditions under which directed teaching is done. Rural training schools should be provided representing the various types of rural schools existing in the territory served. Such schools are now maintained by a number of teachers' colleges.

CHAPTER XVI

SECURING AND MAINTAINING EFFICIENT INSTRUCTION

The public schools of America exist for one and only one purpose. They are manufacturing plants, organized, built, equipped, and furnished with workers of various types and functions, which take the raw material of childhood as it is supplied by the homes and convert it into a product, finished to such an extent as to make a properly functioning citizen. The elementary schools carry on the first stage of this processing. They fit many for a place in life where they can effectively perform numerous useful functions. The high schools carry a certain proportion on to a more complete preparation, and from these the nation receives a different form of service, but one no more essential than is that rendered by the citizens who receive only elementary school training. The institutions of higher learning take some of those who have completed the work of the high school and train them for effective leadership and for professional service in specific fields. Each of these levels of training has its own definite task to perform, its essential contribution to make to the welfare of society as a whole. The units working on each level should be organized and carried on in such a manner as to perform their task so efficiently, and to fit into the entire scheme of public education so harmoniously as to give a maximum of co-ordination with a minimum of duplication. Up to the present time public education has been looked

upon as a state function, but as time and space are eliminated by modern means of transportation and communication, there is an increasing need for a harmonious program of public education throughout our nation with unity, not uniformity, the objective.

At the very heart of any educational program must stand the teacher. Efficient organization and administration are important; adequate finances greatly to be desired; sufficient teaching equipment is of much value; but efficient instruction is essential. It is that for which all of the other factors exist.

If rural children are to have a fair chance to secure an education of superior quality and adequate quantity, they must be given teachers as good as the best. All other matters become insignificant in comparison with this. School boards and superintendents, parents and taxpayers, should think first of how to secure superior teachers, how to retain them, and how to keep them working on a superior level. These are the three problems to which this chapter is devoted. They are the three problems that every community must solve if it intends to deal fairly with its childhood.

SECURING SUPERIOR TEACHERS

Before the question of securing superior teachers can be considered, there must be some tentative agreement as to what a superior teacher is. Four characteristics, at least, would seem to be essential:

1. A character worthy of being imitated by children.
2. A personality that will make the individual effective in dealing with all of the varied life situations which the teacher must meet in working with the children who make up the school and the adults who constitute the community.
3. Training, academic and professional, which will insure skill in

organizing, directing, and instructing those assigned to a classroom or a building.

4. An attitude toward school work and life which will make dynamic the other factors that are listed.

These are rather general statements, but it is very difficult to be specific with the first and second. The third and fourth will be discussed further in another connection.

Method of Employing Teachers as a Factor.—One of the most important matters connected with securing teachers of superior ability is the method of employment that is followed. Superior teachers will be not only professionally trained, but professionally minded. This implies that they will think of a position as something to be secured on evidence of fitness, not by personal influence and "pull." They will wish to present statements as to training and experience to a professionally trained superintendent rather than to make a personal appeal to untrained members of a board. If this professional representative of the board recommends an individual, such recommendation ought to be practically equivalent to an election. The tendency resulting from a system of employment where board members, or others with "influence," must be consulted in order to secure employment in a school system, is to drive out superior teachers and fill the positions which they would have accepted under proper conditions of employment, with those less fit. One thing which a well-trained, efficient, professionally-minded teacher with ideals worthy of a teacher of children will not do, unless driven to it by hard circumstances, is to "log-roll" or toady for a position. The teaching profession and the citizens who desire genuinely efficient schools should see to it that conditions of employment are such as would attract the best teachers to the schools.

Salary as a Factor.—A second matter that must receive attention, if superior teachers are secured for rural schools, is that

of salary. Rural communities cannot hope to be well served by their schools so long as there is as much difference in salaries as now exists between city and rural schools. The difference in salaries paid to teachers in city schools and in rural schools is shown in Table XVI.

TABLE XVI

*Median Salaries of Teachers for 1921 and 1930 in Various Types of Rural Schools and Cities of Different Population*¹

Type of School	Median Salary		Increase in 10 Years	
	1921	1930	Dollars	Per Cent
One-Teacher, Rural	\$ 774	\$ 788	\$ 14	1.8
Two-Teacher, Rural	877	829	-48	-5.5
Three-or-more Teacher, Rural	885	980	95	10.7
Consolidated	987	1,037	50	5.1
Three-or-more Teacher, Village	1,010	1,157	147	-4.5
Median, All Rural Schools	861	926	65	7.5
Cities, 2,500 to 5,000	1,050	1,162	112	10.7
Cities, 5,000 to 10,000	1,147	1,303	156	13.6
Cities, 10,000 to 30,000	1,248	1,428	180	14.4
Cities, 30,000 to 100,000	1,425	1,609	184	12.9
Cities, More than 100,000	1,848	2,118	270	14.6
Median for All Cities	1,542	1,771	247	16.2

¹ Gaumnitz, W. H.—*Status of Teachers and Principals Employed in the Rural Schools of the United States*. Bulletin No. 3. Washington: United States Office of Education, 1932, p. 57.

There is no evidence in the above table, nor is such evidence available, to show what teachers' salaries ought to be. Neither is it possible to go into other professions, unless it be the ministry, to find a basis for determining teachers' salaries. The lawyer, the physician, the engineer, the bank president or high official in a corporation, is each paid in large measure for the personal service he renders or for the financial results of his ability. The teacher's work, however, is not to be measured in terms of dollars or in terms of personal service rendered. The real values that come from the work of a good teacher are spiritual, not material, and these cannot be evaluated in terms of a salary check. How, then, are we to determine what teachers' salaries should be? It cannot be determined by the law of supply and demand, for society holds this in its own control by its licensing laws and by the standards of its teacher-training institutions. If licenses are granted upon a small amount of training, and little or no evidence of fitness, teachers' salaries will go down toward the level of common labor, or even lower, if supply and demand are permitted to determine salaries. It would seem that the answer must be found in another way. Two questions may serve as keys to the problem. The first is: How good a teacher do the best interests of childhood and society demand for our schools? The second is: How much must a worthy teacher be paid in order that she may render the fullest possible measure of service to childhood and society?

The two questions proposed get at the heart of the problem of teachers' salaries. The quality of teaching that children deserve, and the financial rewards a teacher must receive in order to render the best service, must determine the salaries paid. This will demand, in the first place, a salary sufficient to attract into training courses individuals of the proper character, personality, ability, and ideals of life to make good teachers when trained.

In the second place, the salary should be sufficient to provide for the following:

1. A high standard of living in regard to food, clothing, housing, and health care.
2. Cultural growth through reading materials, concerts, lectures, travel, participation in social welfare service, as well as an occasional period in school.
3. Savings that will permit retirement at a proper age with reasonable assurance of necessities and comforts in later life.

The amount that will be required to provide these things is difficult to estimate. It will vary with living conditions, being lower in the country and higher in the larger cities, but it is quite evident that the median and minimum will both have to be raised very materially. The city median of \$845 above the rural median, as shown for 1930 in Table XVI, does not express the difference in living cost between rural communities and cities any more than does the difference of \$956 express the difference in living cost between small cities and those of more than a hundred thousand population. These differences are evidently indications of the superiority of the service rendered city children by teachers of superior training, experience, and skill, as compared with that provided for rural children. So long as there is a marked inequality between the salaries paid rural and city teachers, there will be a movement of the better teachers into city service. To stop this movement, it would probably be necessary to maintain a rural salary schedule approximately equal to that of cities of a population less than 30,000. This would mean a median salary for all rural teachers of about \$1300 per year, with a range of from \$900 to \$1800 per year; though a much higher maximum would probably be required to retain superior teachers in rural service. If, in conformity with the present trends, all salaries were paid from a general

state fund derived by a non-property tax, there would be every reason to pay equal salaries for equal training, experience, and ability, with such adjustments to difference in living expenses as would in the largest possible degree put an end to teacher-migration for salary advantages.

If it is to the advantage of society to educate all children, and if it is just to tax the entire wealth of society to pay for such education, there should be the greatest possible uniformity in the quality of education provided, without respect to the wealth of the community in which the children chance to live. So long as education is looked upon as being given for the benefit of the child, there is some reason for letting the community pay its own educational bills. If education is looked upon as being essential to the future prosperity, happiness, and stability of society, there is no logic in making the type of social training provided for children depend upon the ability or inclination of local groups to provide it.

The School Plant as a Factor.—A third means by which superior teachers may be assured for every school is that afforded by a good and appropriate school plant. A high type of teacher is attracted by grounds, building, furnishings, and teaching equipment that will make work pleasant and achievement of the highest order possible. An unsightly, ill-arranged, poorly heated, inadequately lighted building drives good teachers away, even as it repels the children who are supposed to attend it. If it is located on a lot which is without beauty, adequate space, or recreational facilities, its repelling power is increased? If poor, broken, marred furniture is found within; if teaching equipment is scant or lacking, the power of the physical plant to drive away desirable teachers is practically perfect. Of course a superior teacher may have enough of the missionary spirit to welcome the challenge of such a school plant, and to accept work in it in anticipation of the changes that her energy

and ideals may bring about, but far more often the school will fall into the hands of one whose ideals are not well established, and whose enthusiasm for improvement has been dampened by similar conditions in other places. Here again, society should not permit inability or lack of inclination on the part of a local community to stand between children and the type of training which its own highest welfare demands. There should be state laws governing the selection of sites, construction and care of buildings, selection and care of furnishings and teaching equipment. To make such laws effective it would be necessary to provide a state building and equipment fund to supplement local effort, with an effective system of state supervision of buildings and equipment. Not only will a good and attractive school plant attract good teachers, but it will also give the community a pride in the work of the school that will react profoundly for its improvement.

Living Conditions as a Factor.—A fourth means of attracting superior teachers to a school is that of providing satisfactory living conditions. In many open-country communities it is difficult to find satisfactory homes for the teachers. In fact it is not infrequent, in times of prosperity at least, to find a teacher forced to go to a neighboring town or village to obtain a suitable boarding place. This condition can be remedied in some cases by an appeal to the people of the immediate neighborhood to open their homes to the teachers, even though doing so would result in more inconvenience than profit. The better solution, in the case of a multiple-teacher school, is the teacherage. Some western states with very scattering population have found it practicable to build or rent a small home for the teacher of a one-teacher school, but this is not often advisable. Two- or three-teacher schools present less of a problem, though the rental that would come from so small a group of teachers would probably not justify building or buying a teacherage. In case of

the consolidated schools with from six to fifteen teachers, a teacherage will usually be a good investment for the school board or for a citizen who is interested in better schools. In such a school there is usually at least one married man who would wish to occupy the teacherage. The building may be large enough to accommodate unmarried teachers of the faculty also, or there may be a second teacherage for single women, where the teacher of home economics will be in charge, with all sharing in the cost and preparation of meals. If preferred, help may be employed by the teacher in charge, who will board the other teachers and take full responsibility for the management of the teacherage. It is most fortunate if the teacherage is large enough to provide at least one room for social purposes. Such a campus home may become of great value to students and community as a center for much of the social activity of the school. In some states the teacherage has been made an effective means of attracting and holding good teachers. In a number of European countries the teacher's home, with surrounding garden and orchard, has become as much a part of standard school equipment as is the school building itself.

RETAINING SUPERIOR TEACHERS

Much of what has been said in regard to the features that attract superior teachers naturally applies to their retention. Professional standards for employment, good salaries with fair annual increment of increase, a good building kept in repair and well serviced, good furnishings, adequate equipment, and a tendency on the part of the board to add to such equipment as needs arise, good living accommodations either in private homes or a teacherage, are all features which not only attract but tend to hold good teachers. A number of other factors should be mentioned which may not be recognized at the time of employment, but which are none the less important.

Community Attitude.—It is often difficult for a teacher to know the community attitude until after service has been under way for some time. In some cases, of course, the teacher may create a good community attitude. In others a bad attitude toward the school may exist which may require much time and skill to modify. The old saying, "As is the teacher, so will be the school," has a large element of truth in it, but every community must be brought to recognize that its attitude, as well as that of the teacher, is an important factor in creating the school. Indifference, criticism, the injection of neighborhood difficulties and prejudices into the life of the school, political or personal favoritism, and other undesirable features may greatly reduce the efficiency of the school and the satisfaction which the teacher derives from working in it. The opposite of all of these, on the other hand, will make the school a success, the work of the teacher pleasant, and will increase the probability of building up a good school organization that will run smoothly, efficiently, and economically year after year.

Administrative Helpfulness.—One of the greatest means of building up an efficient, co-operative, loyal, stable, teaching personnel is the spirit and attitude of the administrative and supervisory force of county, township, or district. As was pointed out in an earlier chapter, human relationships are much more personal in rural than in urban districts. The rural school administrative organization does not need to be merely a smoothly working machine. It must be a group of co-operative, genial, and congenial personalities. Much of the satisfaction derived from membership in many rural school systems results from these personal contacts and associations. The county superintendent and his force of assistants, if he is so fortunate as to have any, will constitute a very important factor in the retention of good teachers in the schools of the system. Prompt and cheerful attention to requests, expressed appreciation for

co-operation, freedom in giving and receiving constructive suggestions, absolute fairness and dependability are factors which mean very much to rural schools because they have so much to do with holding a good teaching force together, year after year. Many teachers remain in a system because of the presence of these characteristics in an administrative force; many leave for no other reason than to escape a situation where they are lacking.

MAINTAINING SUPERIOR INSTRUCTION

No teacher is so good but that there is danger of "backsliding." Professional ruts lie parallel to the best highways of method and often perilously near to them. Not infrequently a teacher slips into a rut so easily, and runs along it so smoothly, that there is no consciousness of having passed the point where escape is possible until it is too late. The price of superiority in teaching, like the price of liberty, is eternal vigilance.

Because of the ease with which so delicate a process as artistic teaching is capable of degenerating, it is of the utmost importance that constant effort be put forth to prevent the beginning of the degenerative process in the members of a teaching staff. In no way can money be expended to better purpose than in securing a type of supervision which will not only tend to maintain efficiency, but will actually increase it on the part of the great majority of any teaching force. This task of maintaining and improving instruction by means of an efficient supervisory organization has been quite highly perfected in most of the larger cities of America, but in the majority of states rural supervision has not been made generally effective. The remainder of this chapter and the following one will be devoted to the problem of how to make rural supervision effective as an agency for improving education in rural schools by mak-

ing instruction more efficient in attaining the ends which it should serve.

The Function of Supervision.—At the outset it is important that a clear distinction be made between inspection and supervision. The function of the former is to ascertain conditions as they exist, to record them, and often to report them to some higher authority in the system. The inspector may give no thought as to how unsatisfactory conditions are to be corrected or satisfactory ones preserved, improved, and extended in other parts of the system. Supervision, on the other hand, may concern itself at the outset with determining conditions, but the ultimate aim in view is always improvement. The wise supervisor may never reveal bad conditions to her superior nor even record them in her own private memorandum book. She will always think in terms of correction as applied to that which is not good and of approval and extension of that which is good. Sharp eyes, an ever-ready note pad, an ample supply of standards, and a supersensitiveness to what is wrong or lacking constitute the chief equipment of the inspector. This equipment is also needed by the supervisor but only as a preliminary means toward reaching ultimate ends. In addition the supervisor must possess a clear knowledge as to needed improvements and the best means of bringing them to pass. She must be skillful in applying the better way, tactful in dealing with the person concerned, firm in the face of skepticism and actual opposition, and inspired by a faith that will assure continuance to the point of long-deferred accomplishment. The inspector seeks to obtain a clear-cut photograph of conditions for filing in a central office. The supervisor endeavors to obtain a sympathetic understanding of a school situation in terms of its human relationships, its historic development, its present problems, and its possible future outcomes. The one is an expert engineer studying a machine. The other is a skilled physician studying a

human being whose condition results from complex maladjustments, biological, psychological, and social.

Categorically the chief functions that should be performed by the supervisor are:

1. The improvement of class instruction.
 - a. By personal conferences, following a careful study of the teacher's strength, weakness, and needs as revealed by her teaching technique.
 - b. By group conferences where common needs of a number of teachers are discussed and remedies suggested.
 - c. By specific reading assignments of materials that should prove helpful to the individual teacher or to the group.
 - d. By demonstration teaching for individuals or groups, with the purpose of showing how suggested improvements may actually be carried out.
 - e. By general discussion of teaching objectives, methods and technique before teachers' meetings where those employed in specific types of work, such as primary grades, intermediate grades, one-teacher schools, are brought together.
 - f. By aiding teachers in finding and organizing teaching materials that are being neglected or poorly handled.
 - g. By providing for the shifting of teachers into types of work where they can render better service, or for the elimination of those who seem incapable of improvement or unwilling to profit by suggestions.
 - h. By administering and interpreting standard tests; and by instructing teachers in giving standardized tests and in making and using informal objective tests in their own schools.
2. The improvement of the professional attitudes and ideals of the teaching personnel.
 - a. By planned and purposeful teachers' meetings.
 - b. By stimulating and directing the teachers to formulate common objectives and ideals of service as applied to schools and to community.

- c. By promoting individual and group study among the teachers to the end that objectives and ideals agreed upon may be the better achieved.
 - d. To promote a better recreational and social relationship among the members of the teaching staff with a view to establishing a better spirit of co-operation among them for the attainment of the aims of the school system.
3. The improvement in school organization and management: The supervisor is not an administrative officer, but where the success of the teaching process is being hindered by poor organization and management, it becomes necessary, sometimes, that she step into this field.
 4. The improvement of community relations to the school: This, also, is a field not specifically belonging to the supervisor, but where a lack of proper community interest and attitudes is hindering the success of the school, it is necessary that she apply herself to correcting the situation.

The Progress of Rural Supervision.—While rural supervision is far behind that provided for city schools, it has made considerable progress during the past few years. At the present time nearly all states have some form of supervisory organization. Only three states, Arizona, Colorado, and Rhode Island have no state organization for this purpose.² The number of persons working directly under the state department of education varies from one each for white and colored schools in Arkansas to twenty-one on the supervisory staff in Pennsylvania. New Jersey lists four state supervisors and fifty-five helping teachers under state direction, while Alabama has five regional supervisors contributed by the four teachers' colleges and one normal school, with fifty-two county supervisors working under them. In 1929-30 there were reported to the Federal De-

² *Biennial Survey of Education, 1928-30, Vol. II.* Washington; United States Office of Education. Bulletin No. 20, 1931, pp. 102-104.

partment of Education, 4101 elementary supervisors from twenty-eight states.⁸ These supervisors were all working in the open country schools and in schools of villages and towns having a population of less than 2500. Four of the twenty-eight states employ more than 300 supervisors each, while fifteen employ fewer than 100 each. With more than 450,000 teachers employed in these schools, and roughly 9,000,000 pupils enrolled, it is evident that there is yet a great deal to do before there is anything approaching adequate supervision in the rural schools of the United States. When one considers that at the present time rural teachers rank low both in training and in experience, the serious need for this type of service in rural schools is evident.

Types of Supervision.—There are two general types of instructional supervision: first, the type which deals with all of the work of specified grades, and second, that which deals with specific subjects only, in certain grades or in all grades in which that subject is given. The first, or general type, may include all of the elementary grades, or be divided into primary, intermediate, upper elementary or junior high school, and senior high school supervision. The second, or special type, includes the supervision of music, art, nature, health, reading, arithmetic, agriculture, home economics. In the rare cases where the rural principal is given time for supervisory work, his work is usually of the general type, often very general, indeed. As a matter of fact, most rural principals of combined elementary and high school units are poorly prepared to supervise the work of the elementary grades.

There are quite good arguments for and against both of these types of supervision. The first type tends to give a more unified program, a smaller amount of interruption to the work of

⁸ *Ibid.*, pp. 62-63.

the room-teacher and a reduction of expenses in rural communities where a considerable distance must be covered to reach the various schools. The second type is apt to provide a higher degree of technical skill and a less divided interest on the part of the supervisor. With the coming of interest-unit teaching in many grades, and the probability of its extension to all grades, the reason for employing the general type of supervision becomes stronger. In the lower grades music, art, health, nature, and manual training are largely absorbed by the activities accompanying unit study, with a consequent advantage in favor of a unified supervision. The increase in average training on the part of rural teachers will probably result in a fusion of subjects which are now taught separately. These changes will not make supervision unnecessary but will modify the type given and increase the effectiveness of supervisory effort. It would seem, therefore, that the general type of supervision will tend to displace the special type under the improved conditions.

In states having the county unit of organization, rural supervision is as a rule a county function. In Virginia, while carried on as a part of the county program, a recent law⁴ provides for supervision under direction of the teachers' colleges.

Qualifications for Supervisors.—The qualifications for supervisors should be high. It is much more difficult to teach others to teach well than it is to do good teaching. Therefore, the supervisors should have considerably more training than the average required for the teaching force with which she is working. This training should include certain specific courses dealing with the principles and technique of supervision, and with the giving and interpretation of mental and achievement tests. The training for rural supervisors should include work in rural sociology and rural education, with emphasis in the directed

⁴ See pages 273-276 for discussion of the In-Service Training of Rural Teachers in Virginia.

teaching courses placed upon participation in community organizations operating in connection with the rural training school. Only persons especially interested in rural work should be encouraged to enter this field of service, and actual rural school teaching experience for a specified minimum time should be required for certification. The character and personality of applicants should be carefully considered in admitting to supervisory training courses, in licensing for supervision and in appointing to supervisory positions, for in no other type of instructional service do these two factors count for so much. As to the amount of school training required, it is doubtful whether any standard below four years of college training should be considered as adequate. With so many states requiring a minimum of two years of college training for beginning teachers, and with a tendency to make all long-time or permanent licenses dependent upon four years of college work, a bachelor's degree would seem to be a safe minimum for supervisors. Some states make a master's degree a requirement for a supervisory license, but this may be a questionable practice in relation to a position where successful experience and personal characteristics are factors of so great importance.

The state of New Jersey⁸ is probably setting a precedent worthy of consideration in its law and practice relative to the qualifications of elementary supervisors. The state makes no absolute requirements as to training and experience, but those in charge of supervision pass upon each applicant as to her special fitness for the work. For the school year of 1933-34 practically all the elementary supervisors had a bachelor's degree, about half had master's degrees and one had a doctor's degree. These supervisors are employed by the state, and paid from state funds, but are assigned to the service of a county and work

⁸ Bulletin, *Helping Teacher Supervision*. Trenton: New Jersey State Department of Education, 1928.

under the general direction of the county superintendent, to whom they must report for duty six days before the opening of schools. Their average salary for 1927-28 was \$2768.29 with an additional \$500 for traveling expenses. The salaries ranged from a minimum of \$2150 to a maximum of \$3000. In that year, forty-one supervisors—or "helping-teachers"—all of whom were women, were employed in the state. Two counties employed four, four employed three, and four employed only one. Thirty-nine of these helping teachers did general supervision, while two specialized in music. There were 1669 teachers given general supervision, or an average of 42.8 teachers per supervisor. A summer school or conference, of from one to three weeks, is held under the direction of the assistant superintendent in charge of elementary education; a shorter conference of one or two days is held at Trenton by the State Commissioner of Education. During 1926-27 the helping teachers supervised 296 one-room schools, 129 two-room schools, and 206 schools having three or more teachers. The helping teachers are supposed to work with those schools only which have no supervising principal, but many of the larger rural schools have principals who carry so large a teaching load that the assistance of helping teachers is found to be very acceptable to them.

Duties of a Supervisor.—As a specific example of supervisory duties, the duties of a New Jersey helping teacher are presented in the outline given below. The outline and comments which follow are quoted from the bulletin just referred to.

A. Supervisory.

1. Improvement of teachers in service by means of:
 - a. Observation and conferences.
 - b. Demonstration teaching.
 - c. Teachers' meetings.
 - d. Planning visiting days.

- e. Assisting in organizing extension courses and reading clubs.
- f. Bulletins of suggestions and helps.
- g. Suggesting books and magazines to be read.
- 2. Construction and use of courses of study:
 - a. Co-operation with State Department in making new courses of study.
 - b. Adaptation of state course of study to local needs by addition of bulletins and pamphlets.
 - c. Study and use of course of study with classroom teachers.
- 3. Testing and measuring:
 - a. Giving or supervision of giving intelligence and standardized tests.
 - b. Making of county tests.
 - c. Interpretation of state eighth grade tests.
 - d. Outlining to teachers a follow-up program of classification or remedial teaching.
 - e. Assist teacher in problems of promotion.
- B. Administrative.
 - 1. Planning daily schedule.
 - 2. Keeping records of visits.
 - 3. Reporting to county superintendent.
 - 4. Reporting to State Department.
 - 5. Assisting county superintendent in selecting teachers, recommending textbooks, supplies, etc.
 - 6. Rating teachers.
 - 7. Planning festivals, closing days, contests, etc.
 - 8. Assisting in improving record forms.
- C. General.
 - 1. Taking part in institutes at request of State Department.
 - 2. Participation in community organizations.
 - 3. Participation in educational meetings.
 - 4. Professional and general reading of books and magazines.
 - 5. Visiting of other school systems and normal schools.
 - 6. Study of personal and professional growth.

Comments.—Demonstration teaching has always been a prominent part of the helping teacher's program. She has realized that the classroom teacher needs to see good teaching in order to learn how to do it herself. Therefore, the helping teacher plans to teach frequently and to encourage teachers to demonstrate before others at teachers' meetings.

Meetings should be held once a month if possible. If necessary, schools may be operated on a four-four session in order to make such meetings possible. The program should be planned carefully. Meetings should be for the purpose of solving problems in a mutual way, not for giving instructions which might be sent out in bulletins.

Visiting days are important if the visiting is controlled so that the teacher secures a real benefit. Boards of education should provide substitutes so that, if recommended by the helping teacher, teachers may spend not over two days per year in visiting. The helping teacher should not be expected to substitute, as, quite frequently, she ought to go with a teacher who is visiting in order to discuss with her the points observed.⁶

The New Jersey plan has been to avoid undue standardization of the work of helping teachers. Conditions vary in different counties. In some counties there are still many one-room schools, whereas in others much consolidation has been effected. Previous education and experience of teachers also vary considerably. Helping teachers are free to adapt their programs to the needs and possibilities of their own groups of teachers. They do not visit teachers in turn but apportion their time according to the need. For example, a beginning teacher may need much more help, especially at the beginning of the year, than an experienced teacher. Helping teachers do not outline work for any given period and expect that outline to be followed rigidly by all teachers. They sometimes put emphasis on particular phases of work in all schools, but more often they adapt their program to the individual needs.

⁶ *Ibid.*

Helping teacher supervision has aimed to develop individual teachers to ever-increasing effectiveness. It is an agency of growth, of stimulation and of encouragement, and not a means of rigid standardization. This point of view has been the secret of the success of the work and of its popularity among the teachers and communities of the state.

SUMMARY

The public schools of the United States are manufacturing plants, organized, built, equipped, and furnished with workers for the one purpose of turning out good citizens. They have ceased to be merely a local or state responsibility and have become a function of national magnitude with unity, not uniformity, of output as their objective. At the center of the educational problem stands the teacher and no system of schools can be better than the teaching force which occupies its classrooms.

Worthy teachers must possess excellent character, pleasing and forceful personality, adequate training, and right attitudes toward teaching and life. Four factors are important in securing such teachers. These are: (1) an unhampered professional method of employment; (2) an adequate salary; (3) satisfactory teaching conditions; (4) good living accommodations.

Permanency of position and relative stability in location are important elements in retaining a superior teaching personnel. In addition to the four factors just named, community attitude and administrative helpfulness are strong forces that operate to maintain a high level of teaching efficiency.

Good teachers must be growing teachers. It pays any school system to spend liberally in promoting teacher growth during service. The most effective means of achieving teacher growth in service is a high type of supervision.

There are four major tasks that face a school supervisor. They are: (1) to improve class instruction; (2) to improve profes-

sional attitudes and ideals; (3) to improve school organization and management; and (4) to improve community relations to the school.

Supervisors should have a high standard of character and personality, at least a bachelor's degree with special training for their work and successful experience as teachers in the field they plan to supervise. No supervisor will attain a high degree of success who fails to formulate a very definite program of action in sympathetic co-operation with the teaching force under her direction. The duties of a supervisor are three-fold: supervisory, administrative, and general, each of which should receive a judicious share of attention.

CHAPTER XVII

DEVELOPING A SUPERVISORY PROGRAM

The wise supervisor will always make the program which is promoted a development; she will not impose a scheme already fully formed, upon the teachers under her supervision. A preliminary study of the situation in the schools under supervision, together with her knowledge of supervisory aims, methods and technique, will make the supervisor quite certain, however, of the general program which is to be inaugurated and developed.

THE FIRST STEPS IN THE PROGRAM

If supervision is being introduced into a county or into some other unit of organization, it is well to start with a meeting of the teachers from all the schools which will be affected. At this meeting the supervisor should discuss the general educational conditions existing within the unit and the aims to be achieved through the program of supervision. The important facts which bear upon the problem of improving the efficiency of the schools, such as attendance, retardation, elimination of pupils, pupil achievement, teaching equipment, buildings and grounds, and the community attitude as indicated by school support, should be clearly and frankly presented. This introduction might well be followed by discussion from teachers of experience and standing in the group, mostly selected and notified in advance. Such a discussion will probably bring out many doubts and disagreements as to immediate steps to be taken, as well as the needs that are most urgent. This unsettled state of mind should

result in the appointment of a committee to report at a later meeting upon objectives and methods of procedure. The members of this committee may be selected in advance, in consultation with the county superintendent and experienced principals working within the supervisory area. The supervisor should meet with this group and, in consequence of her advanced thinking, quite largely direct their actions in general conformity with the plans she had previously formulated. The result will be, if the supervisor is tactful and skillful in dealing with people, that a program will be submitted by this group of leading teachers, and adopted as theirs by the entire teaching force, which is in all essential features the one which the supervisor had in mind at the outset. This co-operative plan, however, must really be such in fact as well as in appearance. The supervisor, though in a large measure controlling decisions by her preparatory planning, must be sensitive to the wishes of the teaching force. She must be ready to give up certain of her planned activities and objectives if there is a genuine and intelligent sense of need indicated on the part of the teachers in some other direction.

The most vitally important feature in the supervisory program is the type of improvement to be undertaken first. This will usually be one of the major subjects, such as reading, language, or arithmetic. In some cases, however, it may deal with the organization of instruction, such as the introduction of the unit plan of teaching, or with a general investigation of teaching efficiency by means of a testing program, to be applied to all subjects of instruction. In most supervisory areas the first mentioned type of program is apt to bring the best results, as it is more specific and less difficult of achievement. The introduction of unit-type organization of instruction will usually come as a later development. In place of a general testing program at the outset, tests in the subject being stressed

for the year will often prove more effective. The type of work to be done should be approved by the teachers, if not actually determined by them.

When a subject, such as reading, is selected for the year's program, there should be worked out a general plan of procedure. This will usually include six general fields of activity:

1. A testing program, including the selection of tests to be used, the grades to which they will be given, time to be given, scoring of tests, tabulating results of tests, interpreting tests, planning remedial measures to correct weaknesses discovered by means of tests. (In some cases objective tests are made to save expense, but the wisdom of such a method of economy is questionable.)

2. Modification of the course of study in force so as to adapt it more fully to the specific needs of the supervisory district, without affecting the desirable degree of uniformity which it is planned to secure.

3. The formulation and adoption of certain general principles of teaching as applied to the subject which has been selected as the major problem for the year.

4. An agreement upon a certain minimum of teaching equipment which will be considered as essential for the successful teaching of the subject selected as the major objective for the year. This is usually applied to the supplementary reading material required.

5. The adoption of a general plan of follow-up tests that will adequately and uniformly measure the achievement of pupils in the various grades of all of the schools working under the supervisory program.

6. The formulation of a plan for securing an appreciative understanding of the supervisory program by the patrons of the schools and citizens of the district, and for giving proper publicity to the results achieved.

As supplemental to the general plan of procedure suggested above, it is well to agree upon certain attitudes and ideals which will aid the teachers themselves to strive for and live up to

satisfactory standards. Some of the attitudes and ideals that would seem worth striving for by all teachers are:

1. Every teacher a *growing teacher*.
2. Every teacher a student of her community, of its conditions, and its needs, and of the most effective means by which it can be most efficiently served by its school. This study should be along the general lines suggested in Chapter XVIII.
3. Every teacher a student of the profession to which she belongs, earnestly endeavoring to promote its interests to the end that it may be able to render the greatest possible service to society through the effective training of children for citizenship.
4. Every teacher loyal to her associates in the profession, striving to advance their interests as well as her own, and practicing at all times a high type of professional ethics.
5. Every teacher placing the interests of children above the interests of self, and thinking of her work as being a *calling* rather than a *job*.

The six points listed as phases of the supervisory program present in a general way the tasks that lie before the supervisor, and indicate to the teaching staff the lines of activity which they will be called upon to engage in as a contribution to the program. There should be committees for each of these six general fields of activity, with the supervisor a member of each. Here, as in the formulation of the program, she will be the dominating influence, though as inconspicuously so as possible. It will usually be wise, and well worth the investment of time, to hold a one- or two-day conference during which each of these topics is fully discussed. The committee which has formulated or approved each, should have charge of the discussion, with the supervisor on the alert to see that the fullest possible measure of understanding and sympathy is developed on the part of the teachers for the plans and purposes included

in the topic. When the teachers understand and approve each part of the program, success will be fairly sure.

The five attitudes and ideals listed above indicate the results which the supervisor should seek to secure in the way of personal improvement on the part of the teaching staff. They point the way in which private reading and group study should go. They also indicate the points of emphasis in teacher-rating during the year, and the bases which shall determine recommendation for reappointment for future service.

PUTTING THE PROGRAM INTO EFFECT

Certain points in the program outlined above are of sufficient importance to deserve further consideration.

Testing as a Means of Improving Teaching.—A modern school system cannot afford to neglect the use of present-day testing facilities. No test on the market is perfect, but almost any of them is superior to the guesswork methods of the past. In fact standardized tests have done more than any other single measure to give education the right to claim a place among the sciences. To neglect their use entirely marks a teacher or a system as woefully lacking in the spirit of progress.

A test to determine the level of general intelligence should always precede the administering of standardized achievement tests. A measure of a child's achievement in the various subjects studied is relatively meaningless until the capacity of that child to achieve is known. The results obtained from intelligence tests given a sixth grade class showed the following: The records of two boys were compared. One boy had a chronological age of ten years and six months and a mental age of fourteen years and nine months. The chronological age of the other was fourteen years and three months, and his mental age, nine years and five months. The showing of the bright boy was much better in actual test score than that of the dull one,

but when their achievement was expressed in terms of capacity, the positions were reversed. The accomplishment quotient of the bright boy was 102 while that of the dull one was 119. The dull boy was making decidedly better use of his ability than was the bright one. These cases illustrate the fact that achievement which is not up to mental ability is unsatisfactory, though it may be above the average for the class. On the other hand, that which is fully up to ability, or above, is good for a given pupil though it may rank in the lower quartile of scores. A bright pupil frequently forms detrimental habits and attitudes while making average marks because it is not necessary for him to put forth his full effort to maintain such a standing. The teacher who does not know the mental ability of her pupils, as indicated by a good mental test, is unable to use standardized achievement tests to full advantage. In fact the two extremes of intelligence, to which she should give special attention, often escape detection because the pupils hold rank near the median for the class, though one is doing inferior work, while the other is working at the very top of his capacity.

Individual teachers can use standardized tests to good advantage, but a supervisor can add greatly to the benefits derived from a program which is carried on throughout the system over which she exercises control. Intelligence tests, and standardized achievement tests in the subject or subjects which are receiving major attention for the year, should be applied through all grades, and as the program continues from year to year, achievement tests should be extended to all the subjects of the elementary school. Accurate records of test results should be kept in the central office, and teachers should be carefully instructed and directed in applying remedial measures and in retesting to determine progress. A good testing program, systematically followed up, will soon make it possible to base all promotions on standardized achievement test results. In that way the hap-

hazard testing by individual teachers and the mechanical and ineffective application of uniform examinations of the old type will be avoided.

Teachers' Meetings and Study Groups.—These two features constitute an important part of a good supervisory program. They should have a specific objective definitely related to the general objective set for the year in the program, and should not be permitted to drift away from it. Some meetings should be general, with all teachers in attendance. The purpose of such meetings should be to secure effective co-operation through the understanding and approval of the efforts that are being put forth. These should be conducted by the supervisor and the teachers of the county, except as outside speakers may be brought in to discuss topics upon which the opinions and advice of an expert are needed. "General uplift" addresses should be dispensed with, as they rarely contribute in a worth-while manner to the objectives toward which a program is working. A two-hour program, if carefully planned, will usually achieve the results sought by a general meeting. Such a meeting can be held on Saturday forenoon.

Professional conferences.—Group meetings may be regional, topical, or both. For example, primary teachers, upper grade teachers, or high school teachers of English, either from the entire supervisory district, or from a part of it, may be asked to meet together. Or those employed in one-teacher schools from the whole district, or a designated group of schools, may be brought together. Whenever these meetings are held, like the general meetings, they should be for specific purposes, and planned for well in advance. They may, with propriety, be held on Friday afternoon, or any other afternoon, at a school. The program may often consist of demonstration lessons taught by a superior teacher in the district, by the supervisor, or by a

skilled teacher brought to the district for a specific type of demonstration.

If groups are organized for professional study, it is often well to have them meet following the demonstration lesson, if this can be made to contribute to the topic under consideration. For example, a group of upper grade teachers may be studying the topic of citizenship training. If the demonstration period is devoted to this type of work, the value of the illustrative methods and the text being studied will both be enhanced by having the study-group meet immediately following the demonstration.

Cultural study groups.—The study groups formed among teachers should by no means be confined to the study of professional problems. In many cases, where teachers are well trained, non-professional study is much more profitable than professional study would be. The greatest need of many teachers, especially those in the elementary field, is a breadth of information, interests, and appreciation that will give them a finer cultural background for their work. There will doubtless be those in most supervisory districts who have training and interests in specific fields of knowledge who can act as leaders for study groups in social or natural science, literature, art, music, or current events. If it is possible to organize these study groups under the instruction of a member of the faculty of a university or college, so that those enrolled can get credit as well as profit from the work done, it will be fortunate. That supervisor is doing the most for the schools which she serves who, in addition to improving her teachers in the finer features of teaching skill, is developing in them intellectual interests which will broaden, deepen, and refine their general culture. No group of teachers needs this type of development more than does the group working in the rural field.

Improving Teaching Equipment.—One of the greatest needs in most rural schools is better and more adequate teaching

equipment. The rural teacher has a wealth of teaching materials about her in the nature environment, but other things are needed to make this of the highest value. Four types of teaching equipment are needed in every rural school: (1) books and other reading matter; (2) maps; (3) musical instruments; (4) constructive materials. Each of these will be considered under a separate head. One of the major responsibilities of the rural supervisor is to aid teachers in securing and using this equipment.

Books and other reading material.—Three types of books are needed in every elementary school: (1) reference books and dictionaries; (2) books to supplement the material found in textbooks, and definitely suited to broadening and deepening the learning processes that go on in the school; (3) books of general interest suited to the advancement of the children, but not provided as definite teaching material.

Children should begin to use the dictionary in the fourth grade, and adapted reference books at about the same time. The middle and upper elementary grades should have access to a good but simple dictionary, and one of the excellent illustrated encyclopedias which are available at the present time. High schools should, of course, have a more advanced dictionary and, while much benefit will be obtained from the elementary pictorial encyclopedia, one more advanced should be provided also. A dictionary should be in each classroom. The encyclopedia may be in a central library, though economy is all that should prevent having one in each of the upper grade rooms.

Supplementary books for use in teaching the various subjects included in the curriculum are of greatest importance. The narrow, single-book track that is too often followed in rural schools, is killing to interest and to the development of a genuine intellectual hunger. A wide variety of interesting, well-written,

attractively illustrated, and well-bound books, related to each major subject presented in the elementary school, is an essential to really good teaching and to satisfactory educational outcomes. These should be of two types: sets of books which will enable all members of a class to use the same book at the same time, and single books for use when each child may be reading a different book in working upon a specific question, problem, project, or interest unit.

Sets of books are expensive, and rarely essential. It is quite necessary to have one or two sets of supplementary readers in each of the lower grades, but above that it is rarely necessary to have more than two books of a kind. For example, it will be much better if a sixth grade room has two copies each of several good geographical readers than to have all the readers of one kind. The latter tends to uniformity, the former to the better result of unity. The one-book road will, of course, be easier for the teacher, but the many roads that children may follow through a variety of books which deal with a common subject are far superior to it from the educative point of view.

The library of an elementary grade room should be selected wholly from the point of view of teaching. It should include books of the following kinds:

1. General literature, supplemental to reading sets.
 - a. Folk literature, including myths, legends, fairy stories, fables, semi-historic narratives, derived from the folk-literature of a variety of races and nations.
 - b. Modern literature, including a wide variety of modern children's stories and a good amount of poetry fitted to the different grades.
2. Historical material.
 - a. A wide variety of history stories of various lands; especially of our own nation, and those of European countries

from which our population has been derived. Indian stories which do not class as legends would be included here.

- b. Biographies of great Americans, with emphasis upon those who have made important contribution to our country's development outside of the fields of politics and war. Also of people from other nations who have contributed to world-welfare, such as Watt, Stevenson, Wagner, Pasteur, and Florence Nightingale.
3. Geography.
 - a. Life in other lands.
 - b. Travel and adventure narratives which give clear conceptions of physical characteristics, products, industries, and commerce.
 - c. Description of animal and plant life in other regions.
4. Nature and elementary science.
 - a. General nature material, dealing with animal and plant life, as well as with the physical sciences.
 - b. Stories and simple descriptive matter dealing with geology, physiography, meteorology, and astronomy.
5. Agriculture material.

Closely related to the nature group but more specifically chosen to give children an appreciative understanding of farm life and production.
6. Citizenship and conduct.

Material similar to history but containing much more that deals with community life, government institutions, laws and law enforcement, health and sanitary regulations.
7. Music and art.

Stories of great musical compositions, of noted pictures and other works of art; biographies of musicians and artists. The place of music and art in life.

It may seem that the above outline includes practically everything that can be included in the third type of books for the

school library. This is true in a large measure, but the books included in the teaching list are chosen specifically by teachers for use in relation to learning activities in certain fields. In addition to these, the general library of every school should have a large number of books of fiction, travel and adventure, history, geography, and science, which are not definitely included in any teaching list, but should be available for the general reading not only of the pupils—especially those of superior ability—but also of patrons of the school. The titles selected for class teaching may be thought of as a minimum list of reading material, while the general library titles will be an extension of this minimum into the various fields of knowledge in which elementary school children should be interested.

The school library should include a certain amount of periodical material. There are many juvenile magazines and papers that will be of great value in the school library. In addition, there are United States Government bulletins, free materials that are put out for advertising purposes, various state and local publications, all of which may be of great value to the school. A county newspaper, and a daily newspaper from the nearest city of considerable size, should also be included.

No supervisory program should omit this matter of library development in each school unit which it serves. Small schools should have room collections only, with free exchange between rooms. Larger units, especially those including the high school years, should have a good library room, well cared for and systematically used. Accrediting agencies usually set standards for high school libraries, so that there is much more probability of the promotion of this line of school service in combined elementary and high school units, than in units including only the elementary grades. On the other hand, the elementary schools are often "starved" so far as books are concerned, while state or other standards are rigidly enforced in regard to high

school libraries. The supervisor should make the building of efficient school libraries one of her major objectives, no matter how definitely the program concentrates on a special subject of instruction, for library development will necessarily improve instruction in any subject. There should be state aid for library purposes. Where this is not available, the problem of securing an adequate supply of books is often made serious in certain communities.

Musical facilities.—No matter what the major objective of a supervisory program may be, music should be carried as a minor objective. It is related to every subject of instruction because it is a basic human need; it is interwoven with every type of interest and activity; it is more or less a factor in practically all human situations; it is a means for expressing the heights of joy and the depths of distress; it inspires to battle and carries conviction as a hymn of love and peace. Rural schools have been seriously handicapped in the past by their lack of musical facilities, but there is no reason why this should be so in the future. Pianos are cheaper than ever before and are within reach of the better rural schools; the radio and phonograph, obtainable at a relatively small cost, will bring the finest music to the smallest and most isolated schools. The phonograph is especially valuable, as it can provide selections to correlate with any class at any time. It has another advantage over the radio, in that it is possible to repeat selections over and over in the process of developing appreciation. The supervisor should not only stimulate schools to provide musical facilities, but through a committee of the teachers most capable of directing this work, secure the purchase of really worth-while selections, adapted to the needs of the various grades and to the different subjects taught. This is especially important where a definitely planned program of interest-units is being carried on in the district.

Maps, globes, and charts.—These are of great importance in the work of the elementary school. Geography is the first of the "social science trio" with which the child becomes directly acquainted in a well-taught school. He starts with his own environment, talking of places, distances, directions, streams, hills, lakes, and other physical features that constitute the part of the world with which he is familiar. The efficient teacher lays the foundation for map reading and appreciation in the third or fourth grade by having the children represent by map-symbols the school ground, the community roads, their homestead, and other familiar areas. By the middle of the fourth grade, or by the first of the fifth, map reading should become a well-established skill. From this time on maps and globes become more important as the years pass. Every elementary school should have at least four good maps, well mounted for convenient use. These should be a state map, a large map of the United States, a map of Europe, and a map of the world. The supervisor should emphasize the importance of securing this minimum equipment in maps, as well as a small globe, for every schoolroom enrolling children above the third grade. This material may be omitted at the outset in favor of the library if necessary, but no general improvement in geography teaching can be secured in the upper grades until such a minimum equipment is secured.

Constructive materials.—The primary grades are in greatest need of constructive materials. A few things will suffice, a minimum being some kindergarten scissors, good colored crayons, and an abundance of cheap paper for writing, drawing, folding, and tearing. Clay for modeling and soap for carving are valuable, but not essential. The important thing to the supervisor and her program is her alertness to the needs along this line and a determination to stimulate the board to supply them, or the teachers to secure them. The minimum suggested

is a matter of small expense, and the board should keep a supply on hand in the office of the superintendent sufficient to meet the needs of the children of the three primary grades.

It will be seen from the discussion under the head of "Teaching Equipment" that the improvement of instruction is in no small measure dependent upon securing adequate materials with which the teachers may work. At a time when economy is affecting every phase of school work, it is of the utmost importance that administrative officers, supervisors, and teachers see the real need for certain equipment. They should not look upon these things as luxuries, but as educational necessities. As well argue that the farmer plow with a dull point, or reap with an unground sickle, for the sake of economy, as to claim that the teacher should economize by working with inadequate teaching tools. The first period of "selling supervision to teachers" should include instilling the idea that it is an extravagance, not a saving, to ask a good teacher to work with poor tools.

SUMMARY

The development of a program is essential to success in the field of supervision. Teachers often fear supervision because they do not understand its purposes or its methods. The supervisor should have her plans well formulated in advance but always subject to modification. Leading teachers should be called upon to aid in formulating a program. The program should be definite in objectives for the year, and not too inclusive. "Attempt a few objectives and be sure to achieve them," is a wise principle to follow.

Six steps should be taken in carrying out a supervisory program:

1. A testing program, and planning of remedial measures.
2. Course modifications to meet needs revealed by tests and otherwise,

3. Formulation and adoption of certain general principles of teaching as applied to the specific subject to be worked upon.
4. Agreement upon a minimum of teaching equipment.
5. Adoption of a general plan of follow-up testing.
6. Formulation of plan to secure public understanding and appreciation of the program of improvement.

For the benefit of teachers certain personal objectives should be agreed upon such as: every teacher a *growing teacher*; every teacher a student of her community, and a student of her profession; every teacher loyal to her associates, loyal to the interests of childhood.

The supervisor will do her work largely through the following agencies:

1. Testing program, mental and achievement, and the interpretation of the tests in terms of teaching needs.
2. Teachers' meetings and study groups. General meetings should be for planning and organization. Study groups should be small and composed of those interested in a common problem.
3. Professional conferences. Meetings for teachers of certain grades or groups, such as teachers of one-teacher schools, or those specializing in certain subjects.
4. Cultural study groups, for study of subjects not directly related to the work of teaching.

A major objective of the supervisor should be the securing of teaching equipment. Most important is the school library. Other important materials are: maps and globes, music facilities, constructive materials. Though the supervisor may do many things she must never forget that *better teaching* will always remain her chief aim.

CHAPTER XVIII

STUDYING STATE, COUNTY, AND LOCAL CONDITIONS

There are few expressions in our language more worthy of consideration than this, "Ye shall know the truth, and the truth shall make you free." Ignorance is the strongest and most hopeless chain that shackles freedom. Every teacher in the rural field should seek to know the truth relative to conditions and needs in her state, her county, and her local community. Not only this, but she should make a serious effort to get the essential truth into the minds of children and adults concerning such conditions and needs.

Plans for two types of study are presented in this chapter. One is for the guidance of teachers who wish to carry on a study of their community, county, and state; the other is for the use of teachers in directing pupils of the elementary school in their study of conditions. In case it seems desirable for high school students to carry on studies of this type, the course as outlined for teachers may be simplified, or the elementary outline may be expanded to meet their needs.

THE STUDY OF EDUCATIONAL CONDITIONS AND NEEDS

At the present time public education is a matter of highest social importance and for that reason is considered first in this chapter. A general outline for a study of the subject will be

presented which will be followed by comments on the various topics considered.

A. The state school system.

I. The State Department of Education; its organization and function.

1. The State Board of Education.

- a. How constituted and appointed or elected.
- b. Qualifications, term of service, compensation, and duties.
- c. Strong and weak points in present form of organization.
- d. How could the present form and function of the board be improved as to time of service, number, method of appointment or election, qualifications and duties?

2. The state school executive head.

- a. How elected or appointed.
- b. Qualifications.
- c. Compensation, term of office, duties, and responsibilities.
- d. In what way can any of the above features be changed for the betterment of the school system?
- e. How can these desirable changes be brought about?

3. The state administrative and supervisory staff.

- a. Elementary inspectors and supervisors; number, qualifications, time of service, method of appointment, compensation, duties.
- b. High school inspectors and supervisors; points as for 3-a.
- c. Director of school planning and building; points as for 3-a.
- d. Director of Certification; points as for 3-a.
- e. Director of Research; points as for 3-a.

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- f. Other professional members of the staff; points as for 3-a.

II. State school finance.

- 1. Sources of school revenue; amount received from each, how collected, how disbursed.
- 2. Distribution of school funds.
 - a. Elementary school funds; amount, how obtained, how apportioned.
 - b. High school funds; points as for 2-a.
 - c. Equalization fund; points as for 2-a.
 - d. Higher education fund; points as for 2-a.
 - e. Other school funds; points as for 2-a.

III. State institutions of higher learning.

- 1. State University and affiliated schools; annual maintenance.
- 2. State teachers' colleges and normal schools; annual maintenance.
- 3. State technical schools; annual maintenance. (Note: These institutions should be studied also as to function and efficiency of service.)

IV. Ranking of the state among the other states of the union.

- 1. General ranking of the state educationally, according to the findings of statistical experts.
- 2. Ranking of the state in relation to national medians in such points as:
 - a. Per capita investment in school property, based on school population.
 - b. Per capita expenditure for school maintenance, based on school population.
 - c. Length of school year.
 - d. Holding power of the schools, elementary and secondary.
 - e. Per cent of attendance on census and on enrollment.
 - f. Per cent of children entering high school.

- g. Per cent of high school graduates entering college.
 - h. Consolidation of rural schools.
 - i. The training of teachers.
 - j. Salaries of teachers.
- B. The county school system or other local unit of organization.
- I. The county board of education.
 - 1. Number of members, method of appointment or election, territory each represents, qualifications, compensation.
 - 2. Powers, duties, and responsibilities.
 - 3. How may the present conditions as to the organization and duties of the board be improved?
 - II. The county superintendent.
 - 1. Manner of election or appointment, qualifications, term of service, salary.
 - 2. Powers, duties, and responsibilities.
 - 3. How may present conditions as to this official be improved?
 - III. Administrative and supervisory assistants, including all persons appointed as assistants to the superintendent or as clerical or other help; what improvements may be made in this field of school administration?
 - IV. County school finance.
 - 1. Rate of local tax levy, rate of assessment, method of collection.
 - 2. The school budget, how made and how used.
 - 3. The care of funds, method of distribution, manner of disbursement.
 - 4. Total school revenue per year from local sources.
 - 5. Total revenue received from state.
 - 6. Per cent local funds are of state funds.
 - 7. Per capita value of school property, based upon school census.

8. Per capita expenditures per year, based on school census.
9. School debt, total and per capita, based on school census.
- V. Ranking of the county among other counties of the state and with state averages.
 1. In per capita investment in school property, based on school census.
 2. In per capita expenditures for school maintenance, based on school census.
 3. In length of school year.
 4. In holding power of the school.
 5. In per cent of attendance based upon school enrollment.
 6. In per cent of children entering high school.
 7. In per cent of high school graduates entering college.
 8. In consolidation of schools.
 9. In training of teachers.
 10. In salaries of teachers.

COMMENTS AND SUGGESTIONS ON OUTLINE TOPICS

As an aid to teachers who may use the above outline in a study of state and local school conditions, the following suggestions and comments are offered.

The State School System.—Every state in the union has some form of state school system. In most cases it embraces a state board of education, a chief executive officer, and a subordinate personnel of varying size and complexity who aid the board and chief executive in administering and supervising the schools of the state. The teacher who wishes to be an intelligent member of the school system should make a careful study of it. She should not be content to be merely informed as to the system under which she works but she should be able to interpret it intelligently to those with whom she is associated. She should

also be a constructive critic, ever alert to find points where improvements might be made. Equipped with full information and a helpful attitude, she should consider seriously every feature of the organization, as outlined above, in terms of the following questions: (1) Is this person, or department, or activity, essential to the highest interest of our schools? (2) Are there features in the system which could be eliminated and others which should be added? (3) Is this organization efficient and suited to meet the needs of today? (4) Is too much money being expended in this or that field? (5) Is too little money being expended to make the service provided of highest value? (6) Could the taxpayers of the state receive more for the money expended if the present organization were changed in certain features?

These questions should be thought of in the light of what is suggested in Chapters VI and VII of this volume, in reference to school organization and finance, with as much added information as can be obtained. The organization of public education in other states than the one in which the teacher lives should be studied in order that there may come the understanding that results from a breadth of knowledge.

State school finance.—Of as great importance as the study of school organization is that of educational finance. Millions of dollars should be expended for public education, but not a single dollar wasted. Every citizen has the right to inquire into the wisdom of educational expenditures, and every person engaged in school work should be able to throw light upon any dark spots which the layman does not understand. Not only is the amount expended an important matter, but of even greater importance is the question concerning the source from which the money comes. Some taxes are fair, some unfair. Some are relatively stable as to the revenue produced, others are very unstable. Some are felt as a burden by those who pay them, others are

scarcely felt at all. School administrators and teachers should take the lead in ascertaining what form of taxation is least objectionable to the taxpayer and most effective in supporting the schools of the state. State legislatures control public education to a large degree chiefly by their right to provide revenue and determine its expenditure. Yet the average member of a legislative body has little knowledge that will apply to the solution of the financial problems which affect public education.

State institutions of higher learning.—This part of the study should include an investigation as to the specific type of service each institution renders to the state, the value of its plant, its annual appropriation, the degree to which it renders the type of service for which it was established, its form of control, its enrollment, its graduates, and the cost of attending it as compared with the cost of non-state institutions of comparable rank. In this phase of the study the student should ask: (1) Is there a better plan for organizing and administering these institutions than the one now employed? (2) Are they needlessly duplicating effort? (3) Are they co-operating effectively in their effort to serve the state in their various capacities? (4) If now controlled by separate boards, would greater economy and efficiency result from placing them under a single board? (5) Are they costing too much, or are they receiving too little support from the state? (6) Should there be a more definite distribution of function between them than there is at present? (7) What should be the relation existing between state institutions and private and semi-private institutions working in the field of higher education?

The questions proposed above are not rural, but general questions. Every citizen has a right to an answer to them, and rural citizens especially should be informed about them, since it is often the case that their schools stand at the opposite end of the state educational system, in point of size, equipment, and scope

of service, from that occupied by the great state universities. Yet the smallest rural school is as much a part of the state school system as is the state university, and its teacher is as much a member of the state educational force as is the university president. All of these institutions should be working together in harmony and in unity for a common purpose, and those in charge of any part of a system should have a clear understanding of, and appreciation for, the system as a whole.

The educational ranking of the state.—Comparisons are said to be odious but they are none the less illuminating. State and local pride are good things if based on reason, but if based upon a foundation of ignorant emotion they are dangerous. Many good citizens have an ignorant pride, or a shame, in regard to social, civic, and educational matters; it is certainly the business of the progressive teacher to correct the ignorance in educational matters. In order that she may do this it is necessary that she have quite definite knowledge of what her own state is doing educationally as compared with what is being done by other states and by the United States as a whole. If information is possessed in respect to the points listed in the outline, a very fair idea of how a state stands, as compared with its sister states, is gained. This information may be secured from the latest Biennial Survey of Education of the National Office of Education, from the United States Census Reports, and from reports of the State Department of Education. It would be well for every citizen to know these facts, and no one can give them to him with greater propriety than can the teacher. One influence that retards educational progress is the teacher who has so limited a vision of the importance of the work in which she is engaged that she is afraid to fight for it as a great cause. This type of intelligent propaganda is not specifically a rural need, but it is probably more necessary in rural communities than in urban because of the general backwardness of rural schools and the

large number of relatively untrained teachers working in them. In most rural sections this need for educational education is imperative, and the leading teachers must furnish it.

The County School Organization.—Because there is some form of county school organization in most states, this unit is discussed with the understanding that in states having some other form of local unit, that unit will be studied on the same plan as the one outlined for the county.

It is not only very important but necessary that every rural leader in education should thoroughly understand the county, or other local school unit, of which his school is a part, because of the very close relationship that this unit holds to the individual teacher and to the school through which he works.

The county board and county superintendent.—These two parts of the county school organization are of the greatest importance. The local situation as to their efficiency should be carefully scrutinized and evaluated in terms of the general principles laid down in Chapter VI. Weakness in either, and maladjustment of function, as between board and superintendent, for example, should be located and plans formulated for securing correction of the undesirable conditions. In many cases the board is inclined to trespass upon the function of the superintendent, especially in the matter of selecting teachers. In other cases the superintendent may be inclined to feel that as professional head of the school system he has a right to disregard the wishes of the board and manage the school according to his own judgment. This latter condition is most frequently found where the superintendent is elected by the people and for that reason feels independent of the board. Either situation is bad, since it prevents effective co-operation between two forces that should work harmoniously together. Any study of local conditions and needs must not neglect this point.

Another menace to local school administration is that of per-

sonal and factional interference with what should be wholly professional matters. The local school study that does not look carefully into this situation will be ignoring a vitally important factor. Any effort to improve the schools will be materially hampered until public sentiment is brought to the place where it will not tolerate such interference. Information on these points will be obtained from the state school law, and from personal observations and inquiry among the people of the county. The latter source will reveal most of the difficulties.

Local school finances.—Local taxation is a danger point in education. Because of that fact it should constitute a major topic in the study of local educational conditions. Rate of assessment, amount of levy, method of collecting taxes, disbursement system, budgeting and publicity as to financial matters, should be carefully investigated. The information on this point will have to be obtained locally from those responsible for assessment of property as well as from the school board and superintendent. Chapter VII of this volume should be carefully reviewed in connection with this part of the study and books on school finance consulted.

Educational ranking of the county.—The data necessary for this phase of local school study may usually be obtained from the reports of the State Superintendent of Schools. In order that the comparisons may be meaningful, the financial ability of the county should be known as well as the mere facts regarding conditions. This can be ascertained by finding the per capita wealth of the counties included in the comparison. In some cases the per capita wealth in one county will be many times that of another. The most significant comparisons are obtained from those counties having approximately the same per capita wealth.

The holding power of the school will usually have to be figured. The per cent of pupils retained in each grade may be found by determining what per cent those enrolled in a given

grade are of the average number becoming of school age each year. This is a most significant figure as it indicates school efficiency. It is not usually possible to learn the number of pupils coming of school age each year, but the average of the enrollment for the first, second, and third grades may be taken as an approximate figure.

In most cases comparative figures in regard to consolidation and transportation and the training and length of service of teachers, may be obtained from state reports.

GENERAL INFORMATION OF IMPORTANCE TO RURAL TEACHERS

There are a number of things about the county and local community that every superior rural teacher should know. Since the social institutions with which she is chiefly concerned are built upon a physical and biological foundation, the teacher should have a fairly accurate knowledge of those factors as they affect the community in which she works. There is what may be termed a minimum essential of facts concerning the community which she should know. Some of these facts must be gained first hand through observation and a proper inquisitiveness. Much can be gathered from books and statistical reports. While no one can accurately state just what this minimum should be, the following list is at least suggestive.

1. Approximate area, surface features and drainage, soil characteristics, natural resources.
2. Number of farms; average and median size of farms; average value of farm lands; value of farm buildings and improvement; value of farm machinery; farm ownership and tenantry; farm indebtedness.
3. Chief farm crops with production per acre; livestock and poultry on farm with value of products; fruit and vegetable production with value of products.

4. Trading and marketing centers; transportation facilities; farm organizations and co-operatives; farm and home service agencies, including farm agent, home demonstration agent, and junior club worker; public health facilities; religious, civic, economic, and fraternal organizations.

The items included under 1, 2, and 3 can be obtained from the latest United States Census Abstracts on agriculture and population. That included under point 4 will have to be gathered in a very large measure by personal observation and inquiry. It is not to be assumed, of course, that any person would be expected to keep this information at his tongue's end but he should have it in his possession for use as needed. In a later chapter emphasis is placed upon the responsibility of the school for the improvement of the community. The teacher who accepts the principle that the school does have obligations beyond its own grounds will find such information as suggested above a most valuable asset. It is only the superior teacher who will make use of this information. The poor teacher will not care for it because she will attain her ideal in the formal grind of textbook recitations. The average teacher may not feel the need for it because her ideal will have been reached when she has taught the formal subjects a little better than the poor teacher, and has widened her instruction beyond the confines of a single text.

COMMUNITY STUDIES FOR ELEMENTARY SCHOOLS

It is not enough that rural teachers have an abiding interest in the community, county, and state in which they are located. They should lead their pupils into a like interest by means of a study similar to the one above, but greatly simplified. The need for starting all phases of social science with the local environment of the child was discussed quite fully in Chapter XII. At this point only those topics will be introduced which are inti-

mately connected with the life experiences of the elementary pupils. Such pupils should start with their own community rather than with the county, and they should learn how to gather first hand information by co-operative effort. Since the interest of children is always increased by constructive activities, the development of a study outline and the construction of two charts are proposed.

The outline as given below is for the purpose of guiding in the study of the simple, social and economic features of the community and county. It should be the result of co-operative planning on the part of the children, though guided by the teacher.

1. Our School.

- a. How is it controlled?
- b. How is it paid for?
- c. Who built and paid for the building? Who provided grounds and equipment?
- d. How are our teachers trained, selected, and paid?
- e. What might be done by state, county, or community to improve our school?
- f. What can we do to improve our school?

2. Our Churches.

Two or more churches will probably be represented in the school. An outline similar to the one for the school should be developed with emphasis upon the topic: For what common purpose do all of our churches exist? Care must be taken to avoid discussion of denominational differences.

3. Government and Law Enforcement in Community and County.

An outline for this should be developed by the class, taking up courts and enforcement officers, taxes and tax collection, public improvements other than education. Emphasize the duties and responsibilities of citizens, and the good citizenship activities in which children may engage.

4. Occupation of Our People.

A list should be made of all the occupations in which the people of the community engage and the value of each to society. This will lead to the study of farm and village occupation as suggested below.

One of the two charts suggested will present important facts regarding the farms and farm production of the community; the other will present occupations of people in the village community, in case there is a village of sufficient size to justify the project.

COMMUNITY FARM CHART

For the . . . District, County, Virginia.

Name of Farmer	The Farm		Field Crops				Farm Animals			
			Corn		Wheat		Cattle		Hogs	
	Size	Value	Acre	Bu.	Acre	Bu.	No	Value	No.	Value
Allen, Jas M	185	\$ 9,250	45	1,800	22	390	28	\$1,680	20	\$220
Jackson, R. Y.	80	3,200	15	450	8	106	7	240	8	56
Wilson, J B	260	18,200	65	3,380	40	800	64	2,690	45	450
Totals										

This chart should be made on a large sheet of manila tag board, or white bristol board, about twenty-four inches wide and long enough to give room for all the farms in the district. The general items would be extended to include fruits and vegetables, pasture lands, and forest lands. Under each general head there should be listed all the important field crops, farm animals, and fruits and vegetables raised in the district. Children old enough to do so should secure the desired information about their home farm. Certain ones should be appointed to obtain the desired information concerning farms not represented in the school.

Some farmers may refuse to give the information desired, in which case a note should be made of the approximate area of the farm for which data were not obtained. The preparation of this chart will provide a large amount of profitable work. Ruling and lettering should be done by pupils skilled in such work. Arithmetical computations should be carefully made and verified. Values for farm lands should be obtained from the assessor's books, so far as possible. The value of livestock should be determined by the farmer who reports it; or better, by a committee of farmers who meet at the school and fix values for the various kinds of animals listed, either as a district average, or by approving or changing the value placed upon the stock by the owner. The work on the chart will probably enlist the aid of most of the children above the third grade, and is especially valuable as a project for a one-teacher school. In a multiple-teacher school, one room may work alone, though it will be more interesting and of more value if all of the rooms above the third grade co-operate; or, one grade may take the land area, another the livestock, others the farm crops, fruits and vegetables, pasture lands and forests. Responsibility for verifying computations and estimates of the lower grades should be assumed by pupils of the seventh and eighth grades. When this work is completed a most interesting community program may be provided by having pupils explain the work they have done and display charts.

In studying the rural village the chart form may be used for tabulating the data gathered in regard to location, transportation, and communication facilities; residences and population; business houses and banks; manufacturers as to number, types, and products; professional men living and working in the town; churches, schools, and other public buildings. If preferred this may be put up as a well-arranged booklet to which all the children contribute, illustrated by photographs or by sketches made by pupils.

The outcomes of this type of work will be of four kinds: (1) information gathered; (2) methods of securing first hand data learned; (3) local interests developed; (4) the co-operative spirit cultivated. Each of these outcomes is valuable and will not only contribute to the education of the children but to that of the adult population as well. Other community studies for the elementary grades are included under the topics of geography, history, civics, or nature in Chapter XII. The children who study the local rural community according to the plan outlined may go to the city or enter some non-agricultural trade, business or profession, but, as a result of it, they will have a fuller understanding of, and sympathy for, the farmer. They will appreciate the economic difficulties he faces, and will continue to face, until his business is given a better chance than it is receiving at present. The rural child who studies and understands his community will give the farm a fair chance when he makes a vocational choice, a thing which he usually does not do under present school and community conditions.

SUMMARY

The teacher who does not have a broad and rather intimate knowledge of her community is seriously handicapped. One who does not study her community misses a valuable opportunity.

Two phases of study should be carried on by anyone wishing to have the fullest power to serve as a teacher. One is the study of the school system of which her school is a part. The other is a study of the physical, social, economic, and political conditions as they exist in the community and county in which the school is located.

The study of the state system should include the organization and function of the State Department of Education, the state's method of financing public education, state institutions of higher

learning, the ranking of the state among the states of the union in those features which indicate the efficiency of the state elementary and secondary schools. Emphasis should be placed upon the question of how the state system could be changed so as to make it more efficient.

Counties should be studied in a manner similar to that suggested for the state, with comparison between counties. Much data for this study must be gathered from local sources, especially in regard to inefficiency and misuse of funds or power. The teacher should also study her county as to area, surface, soil, and natural resources; farms, farm improvements, and farm machinery; crops and animals raised on the farms; trading centers, transportation facilities, and community service facilities; social, civic, and religious organizations. A simplified form of study similar to the one for teachers should be used as a part of the social science work of the high school, and a much more simple study of community and county should be made in the elementary school.

CHAPTER XIX

OBLIGATIONS OF THE RURAL SCHOOL TO COMMUNITY

The first and highest obligation of any elementary or secondary school is to give to those who are committed to its care the legal number of hours per day, and days per week, of thoroughly good instruction. There is no other service which the school can render to the community that will provide an excuse for neglecting the performance of this, its essential function. But, as was pointed out in an earlier chapter, the average rural community needs many types of service for which there is no provision in its civic set-up. Because of this condition, there is a much greater need for leadership from the school than is found in cities, where all forms of social and civic organizations are more complex and efficient in functioning. In order to arrive at a guiding principle as to how wide a service the rural school should attempt to render, it will be necessary to make at least a tentative statement concerning what its legitimate responsibilities should be.

Public schools exist for the purpose of producing a type of citizen which will contribute in the fullest possible measure to the welfare of the social order which maintains them. It seems evident that whenever the community in which the school works maintains those conditions which will enable it to perform this service in the most satisfactory manner, the school has no responsibilities beyond the border of its grounds. When, on the other

hand, there are conditions existing in a community which make the efficient performance of its function impossible, the school should undertake, as a part of its function, to correct these unfavorable conditions. A number of general conditions exist as limiting factors that warrant discussion at this point.

COMMUNITY INDIFFERENCE TO EDUCATION

Indifference to the work of the school manifests itself in a number of ways. Chief among these are (1) non-attendance, irregularity, and chronic tardiness; (2) failure to co-operate in movements for school improvement; (3) disciplinary problems; (4) efforts to use the school for personal advantages. All members of the community may not show these characteristics, but when they are quite generally manifested, it is evident that there is not a public opinion existing in the community that positively supports the school.

One step toward remedying this situation is for the teacher or teachers to scrutinize and evaluate with care the efforts being put forth within the classroom and upon the playgrounds to make the activities which they direct of real value to the pupils. "Teach through your pupils to the community" is an ideal which, if vigorously and tactfully followed, will often win an entire community to the support of a school. In order to do this effectively, the teachers must not merely know how to teach, but they must understand the community in which they work. This demands real community study and appraisal, a process which can be greatly aided by an efficient superintendent or supervisor.

A second remedial step is the formation of some organization, such as a Parent-Teachers Association, a community club, or a parents' study class. In most cases the Parent-Teachers Association or community club precede the parents' study class in point of time. The first step in organization may be difficult in some communities, but a very small nucleus will make a start pos-

sible. The matter of chief importance is for the teachers to have a real service to suggest which the proposed organization can perform. Much harm is often done by those eager for the credit of having organized their community, who have no program in mind, nor worth-while objectives to attain. The first aims of the organization should be fairly easy of attainment, and of a character to attract the attention of the community. A clean-up of school building and grounds, money for the purchase of books for the school library, the purchase of a school flag, means for securing books and clothing for poor children of the district, are a few of the needs quite generally found which are attainable and attract public attention. Careful minutes of each meeting, and a record of each achievement should be kept in order that the plans and results of one year may form the stimulus for those of the next. From them, too, should come publicity reports for the local paper. Not who has been elected to this or that office, but what results have been attained, are the matters to be stressed in all press reports. Factionalism and jealousy are frequent causes of discord in rural communities, and too much personal mention tends to the development of both.

If the state has a standardization plan, it will often constitute an excellent point of attack in a campaign to overcome community indifference. An effort to attain a standard ranking draws a portion of its appeal, often a very large portion, from the rivalry reaction. The citizens of a community are led to observe: "The building in X district is Standard. The one in district Y, which is not as wealthy a community as ours, has just been rated as Superior-Standard. We ought not to let them excel us." This may not be a high type of motive to engender, but it is effective; it starts community pride in co-operative achievement for the good of the school. This spirit, once started, can be kept growing and trained into more worthy directions.

When a community begins to take an interest in its schools it

has started toward better things. The door to progress is open, where it had previously been closed and barred. When indifference gives place to interest, wise teachers can lead a community to strive for higher objectives, such as: a better form of instruction; a more effective type of school control; a broader training and higher ideals on the part of the pupils; and emphasis upon the essential value of education rather than upon its more superficial elements. All of these may be gradually developed in the public mind under the guidance of teachers with faith, vision, ability, and perseverance. Those responsible for the success of public education cannot sit idle in the face of public indifference and escape condemnation. Since the schools cannot turn out worthy citizens in an atmosphere of indifference to education and to the higher things of life which right education brings, it becomes the major task of the teachers and their administrative and supervisory guides to modify this atmosphere so as to permit them to perform the essential tasks for which they receive public support. While this service is in a way outside of the formal work of the school, it is most intimately related to the training for citizenship which the school must do.

HEALTH CONDITIONS AND SCHOOL EFFICIENCY

Poor health is one of the serious contributing factors to irregular attendance, retardation, and elimination from school. It not only keeps the child out of school, but it also makes him incapable of doing his best work when in attendance. Formerly, residents of rural sections had better health, on the average, than did those of cities, but the situation has been reversed during the past fifty years as regards a number of common diseases and minor hindering defects. Sewage systems and water purification, public health service, milk and food inspection, free clinics and hospital service, have all operated to improve greatly certain health conditions in the modern city. Many of these advantages

have been slow in reaching rural communities, with a consequent lowering of relative rural health standards. There are certain facts, however, which indicate that a number of serious human ailments are quite characteristically urban. Health statistics for the purpose of comparing urban and rural conditions are not readily obtained except from the records of states having effective vital statistics laws. Sorokin¹ and associates, in commenting upon the data presented in regard to the health of urban and rural populations, say: "These generalizations and the data concerning 'general disability and sickness' prove that, on the whole, the country population and the agricultural class are healthier than the city population and the majority of the larger occupational groups of the city." Statistics for the state of Tennessee are given in a form that permits ready comparisons as to the death rates in rural and urban areas. The data included in Table XVII are for the year 1931.

Though the rural sections have lost their advantage in health so far as certain diseases are concerned, this table indicates that on the whole they make a most favorable showing. In only five diseases does the rural death rate stand higher than the urban rate, and that only for white population. The combined white and colored data give the rural sections the disadvantage in only four diseases, typhoid, malaria, tuberculosis, and pellagra. In deaths from such important diseases as influenza, syphilis, cancer, diabetes, apoplexy, nervous diseases, heart diseases, pneumonia, stomach diseases, genito-urinary diseases, and puerperal infections, urban communities run higher than rural, often in marked excess.

Where there is a health organization in the county, the chief responsibility of the school should be in helping carry out its program. Arrangements will be made through the schools for

¹ Sorokin, Zimmerman, and Galpin—*A Systematic Source Book in Rural Sociology*. University of Minnesota Press, Vol. III, 1932, p. 69.

TABLE XVII

*Deaths per 100,000 Population During the Calendar Year of 1931 for Urban and Rural; White and Colored and a Combination of Urban and Rural Both White and Colored*²

Diseases	White		Colored		Total Population	
	Urban	Rural	Urban	Rural	Urban	Rural
Typhoid	5.3	10.2	9.3	22.4	6.4	12.0
Malaria	3.9	3.9	9.8	14.5	4.9	5.4
Measles	5.1	4.1	2.4	1.1	4.3	3.7
Whooping Cough	6.0	5.0	16.6	7.6	9.1	5.4
Influenza	37.1	32.5	65.9	46.3	45.3	34.4
Tuberculosis, All	72.0	86.6	224.6	225.1	115.7	106.4
Syphilis	11.9	2.7	76.7	14.5	30.2	4.4
Cancer	90.1	48.9	70.3	44.9	85.0	48.4
Pellagra	6.4	10.3	16.1	16.6	9.2	11.2
Diabetes	18.5	8.3	16.6	8.0	18.0	8.3
Apoplexy	71.6	47.4	132.3	68.0	88.9	50.3
Other Nervous Diseases	28.3	21.3	40.5	38.8	31.8	23.2
Heart Diseases	137.3	79.8	242.2	144.1	167.2	69.2
Pneumonia	97.7	66.1	198.2	97.0	126.4	70.6
Stomach Diseases	13.3	7.3	26.8	13.4	17.1	8.2
Intestinal Diseases	33.7	34.4	45.9	29.6	37.2	33.7
Genito-Urinary Diseases	109.9	64.5	212.4	98.0	129.2	88.7
Puerperal Causes	9.8	4.9	15.2	11.2	11.1	5.6
Suicide	27.1	10.7	6.4	1.8	21.2	9.4
Deaths under 1 year	73.6	56.6	135.5	76.4	89.9	59.0

² *Annual Bulletin of Vital Statistics*, State of Tennessee, Department of Public Health, for the year 1931, pp. 14-15.

physical and health examinations, and teachers will check on health habits and corrective measures advised for the children of their rooms and report them to the health officer. All will be on the alert to see signs of contagion among the children. During play periods and physical drills there will be constant consideration for those children who are not inclined to take the needed amount or kind of exercise. In this way the school becomes an effective adjunct to the health organization, and thousands of hours are saved for school work by the reduction in the actual amount of illness and by the physical and mental vigor that results from health and abounding life.

An excellent illustration of the co-operation between schools and a county health organization is found in the report of the development of the Rutherford County, Tennessee, Health Unit. This health unit was established in 1924 through the co-operation of the Commonwealth Fund with the county of Rutherford and city of Murfreesboro. The following brief account of this work is derived from the report of Dr. Mustard,⁸ organizer and first director of the work.

Through the first few months of opportunism a definite pattern of work was being laid down. The examination of school children was selected as the first step for a number of reasons. School children are easily reached; they would carry school news back to almost every home in the county; and follow-up work indicated by the examinations would give a sound reason for entering hundreds of homes. As was expected, this visiting of the home in the interest of the children at school gave the nurse a friendly introduction to many expectant mothers, infants, cases of tuberculosis, and in fact to most personal health needs and community sanitary problems. At the same time, and in close relation to the activities of the doctors and nurses, school health

⁸ Mustard, Dr. Harry S.—*A Cross-Section of Rural Health Progress*. New York: The Commonwealth Fund, 1930, pp. 27-94.

education, and the work of the sanitarian were being pushed in proportion to the absorptive power of the community.

The teachers and children took hold at once. Here was something tangible, something that offered recognition when a goal was reached. Haltingly begun, the plan grew in significance until it was seen to be vitalizing the school health program, putting together diphtheria inoculations and the eating of "greens," good posture and the correction of defects, and making a unit of the whole. Furthermore, as the plan included a cup for the school with the highest per cent of "Blue Ribbon Children," the idea of competing with some near-by school and with other schools in general, strengthened the effect upon the individual.

By the end of 1928, with the aid of the Director of Health Education, a strong teachers' committee had made much progress in formulating an outline for the study and teaching of health in Rutherford County. This program included morning inspection for cleanliness and neatness, and was later extended to include inspection for signs of communicable diseases. Score charts were prepared and used by the teachers. A red star indicated a satisfactory condition. A blank indicated a condition to be remedied. When the condition had been remedied, a blue star was put into the place. A gold star was placed after the name of the child when all unsatisfactory conditions had been corrected.

As time went on it became evident that something more than information was needed. The interest of the children needed to be enlisted. A health contest was organized in the form of Blue Ribbon Registration. To gain this honor a child had to qualify in individual health rating, immunity status, and the practice of health habits. A further stimulation was secured by providing a health bar for individual members and a silver loving cup for the school showing the highest per cent of "Blue Ribbon Chil-

dren." The first contest covered a period of three months, January 1 to April 1, 1926, at which time 385 children from 23 schools qualified for the blue bar. By the end of the next year 1006 children had won that badge of merit. Two years later, at the close of the school year of 1929, there were 1889 "Blue Ribbon Children" in the schools of the county.

The work continues to grow. In the spring of 1933 there were 3263 children in the county who had met the health requirements, and by 1936 there were 3406 children who marched in the great health parade in the county seat. The general interest in this parade, and the excitement on the part of the children and parents were quite like that which accompany a great circus parade.

This story illustrates the aid which teachers can render to a health organization. Each is relatively ineffective without the other. Dr. Black, the present Director of the Health Unit, says of this matter: "The schools and the community health committees organized in them have been the greatest aid we have had in putting over our county health program."⁴

In counties where there is no organized health service, the responsibility for health instruction and guidance must be assumed by the teacher, so far as the children enrolled are concerned. Very much less effective work can be done under such circumstances, but the health of school children is so vitally important to the essential function of the school that where no other agency is attending to it, the school must do what it can. Formal health instruction is required in elementary schools, and health guidance and physical training should give opportunity for the application of the principles taught. In this way school instruction and health service to pupils and community may go hand in hand, each aiding the other. Teacher-training institu-

⁴ Black, Dr. J. B.—Statement made to the author.

tions and certificating agencies should require that prospective teachers have such training in health subjects as will make this form of service possible when no special health service is provided. Play and recreation, with accompanying accidents, provide many opportunities for health instruction. School lunches, either furnished by the school or brought from the homes of the pupils, give a different type of, but no less valuable opportunity. Many diseases are directly traceable to nutritional deficiencies. The mere reading about foods and eating habits which promote health is of little practical value. Where school lunches are prepared and served by the school, the girls who aid in their preparation may learn valuable lessons about balanced meals, proper cooking of foods, and methods of serving which should carry over into the homes of the community. Children should learn in this manner how to select health-giving foods. Those having specific health difficulties which need correction should learn the relation of proper diet to the trouble from which they suffer. Children with bad teeth, for example, should be taught in class and at the table what foods will serve as tooth-builders. Those underweight should have their diet supervised with the correction of this condition in view. Those subject to indigestion, headaches, and other kindred troubles should be instructed in the necessity of selecting proper foods, of masticating the food sufficiently, and of observing other hygienic practices. The cleanliness of hands, face, and teeth should be discussed and the facts presented in their relation to full bodily development and abundant health. In this way, health instruction and corrective measures will be combined in such a way as to secure the best possible results. In like manner the heating, ventilating, and lighting of the school building should be discussed in the health classes and wrong conditions corrected in so far as possible. In cases where lunches are not served by the school, a period of from fifteen to twenty minutes should be designated as lunch

time, and no play of any kind permitted during that time. This practice, even without instruction as to proper eating habits, will be of value to the health of the children. If right practices in eating and in good manners are mentioned, even more good should result.

While the school cannot undertake to function as a health organization for the community as a whole, its health program will carry with more or less effectiveness into the homes represented. If an active and effective community organization is maintained, the school health program may be made much more potent as a community influence through the discussion of health topics at its meetings, and parent co-operation in corrective and constructive work with the children will be made much more certain and effective.

GOVERNMENT AND LAW OBSERVANCE

The school is a part of the governmental machinery of the county and state, and as such should give an account of itself in securing an improvement in the observance of law throughout the territory which it serves. In conformity with the general principles stated above, it should not concern itself with those phases of government and law observance which do not directly affect it, but should be fearless in its attitude toward those which do.

Rowdyism which disturbs night meetings at the schoolhouse, or injures school property, should be curbed by the enforcement of the law, and teachers should show no hesitancy in seeing that such conduct is promptly reported to the proper authorities. In addition, such conduct should be fearlessly, though tactfully, discussed in the civics classes. Truancy is a form of law violation that very directly affects the school and one that is often winked at for fear that those concerned will be offended. Teachers should not perform their duties in a merely perfunctory manner

in this connection, but should vigorously insist that attendance laws be enforced to the point where they will bring children concerned into school regularly. Children should be taught that laws of minor importance, such as those concerned with fishing and hunting, should be cheerfully observed, and that persons who do not observe them should be forced to obey them, no matter who they are or where they live. The writer once knew a county school superintendent and some of his prominent teachers who escaped being indicted for seining in violation of the law only by an artful evasion of the truth. The effect of such conduct upon the attitude of children toward law observance is quite obvious.

Many communities, and in fact entire states, are being handicapped at the present time by the attitude of citizens toward the payment of taxes. The school should very specifically handle the matter of taxation, not in terms of general textbook statements, but in relation to local situations. What taxes do for the taxpayer should be clearly brought out, as should the waste of public funds through poor governmental organization or actual graft. This subject has been touched upon in another place, but at this point it is referred to again to illustrate the fact that the school is under obligation to create in no small measure its own governmental and social environment. If the schools do not definitely undertake to improve the civic conditions that exist about them, they will be failing in a great responsibility, and their work of educating children for citizenship will be seriously affected. Work for the community in this field is even more closely connected with the formal school work than it is in the field of health, because these matters can be very naturally and effectively brought into history, civics, geography, and arithmetic classes. By such correlation of community problems of citizenship and government with the class work of the elementary and secondary schools, the schools will be able to benefit their com-

munities far more than by following the routine form of book instruction.

ECONOMIC LIFE OF THE COMMUNITY

While spiritual rather than material values are the chief end toward which public education should be working, there ought to result, as a by-product of the educative process, a very definite material return to society. One ideal toward which every teacher should strive is that of making the children who come under her instruction better earners and wiser spenders of money. She should strive to increase the interest of the people in education, to make them more healthy and physically vigorous, to give them a greater respect for law and an increased desire to promote good government, and instill into them higher moral ideals. But while doing these things she should not neglect to promote material prosperity.

Farmers are less prosperous than they should be. The chief remediable causes for this condition are: (1) lack of a spirit of co-operation in buying, producing, and marketing; (2) failure to appreciate the great contributions science and invention are making to agriculture and to utilize them on their own farms; (3) disinclination to employ a simple system of accounting in their business which would enable them to improve their condition without the investment of a single additional dollar; (4) an inclination to practice, in their farming activities, a false economy which constitutes a real extravagance.

The elementary school must not be made a vocational school in any sense, but each of these four weaknesses that affect the farmer in a material way can be corrected to some extent by a slight modification of the content presented and the technique employed in the ordinary work of the school. Attitudes and ideals are important outcomes of elementary education, and the four difficulties mentioned are largely the result of wrong atti-

tudes and ideals which can be improved by means of the instructional material which the elementary school presents. The spirit of co-operation is a direct outcome of the right type of school organization and instruction, and if proper generalizations are developed in school, the attitude established in school will carry over into out-of-school life.

The indifference of many farmers to the scientific principles involved and the methods employed in agriculture is largely the result of attitudes developed during childhood from parental influences, and of the influences of neighbors and hired help on the farm. These attitudes are retained because of the utter lack of any form of nature instruction in the elementary schools, and because of the formal and relatively functionless science that is taught in our rural high schools. Many fairly good farmers still have faith in moon signs as being controlling factors in crop production. With a firm belief that the potato crop depends upon the sign of the moon in which the planting is done, why should the farmer bother about using potash fertilizer, disinfecting the seed, or considering methods of planting and cultivating? Systematically organized nature study and elementary science—which are a natural outgrowth of the nature contacts of the home, garden, orchard, and fields—included in the elementary school courses and followed by equally well-adapted courses in general science and biology in high school, will do much for the average American farmer.

The lack of even the simplest form of farm accounting, and the prevalence of poor business methods, are other hold-overs from the day when an abundance of virgin land and a small need for cash income made inefficiency a matter of small concern. The present need for a changed attitude can be met in a large measure by giving a "rural set" to thrift lessons and to the study of business forms and practices in the arithmetic classes of the seventh and eighth grades. In high school a definite group

of skills which bear upon this phase of the problem should be provided in a course in farm and household accounting.

The tendency to be "too saving to make" can best be handled by effective training in clear, straight thinking relative to the problems of home and community life. It is true that some children are born with a very limited power to think. If this be the case little can be done for them. Such children should be steered away from the farm to the highly mechanical employments found in industry and business, where lack of thinking power counts for relatively little.

SOCIAL LIFE OF THE COMMUNITY

The average rural community is seriously deficient in the social life which it provides for its youth and adult members as well. The old fashioned work-type gatherings which a generation or two ago furnished a considerable amount of social life, have been almost wholly discontinued, and in too many communities nothing has been developed to take their place. Improved roads and automobiles have made it possible for many young people to go to the larger towns for moving pictures, and in some progressive rural villages and towns the churches have undertaken to meet social as well as spiritual needs. But this need is not being adequately met in most communities, to the marked disadvantage of young people in their teens and early twenties. It is often quite difficult for a one-teacher school to function along this line, but this is not true of the large consolidated and centralized schools of today. These schools, with facilities for music in the form of singing organizations, orchestra, band, radio, and phonograph, can provide this essential for pleasant social gatherings. In communities where dancing is not taboo, the gymnasium should afford opportunity for this form of social recreation, under conditions that should remove the objectionable features so often found in public dances and in many private ones.

There should be a dramatic club in larger schools which would be able to give a number of programs during the year. Debates, either between teams within the school or with other schools, should arouse an interest that would be good for both school and community. Into all of these activities the school should draw persons past school age. Many men and women between twenty and sixty will gladly take part in these forms of recreational and cultural programs if once their diffidence is broken down and they are made to feel that these things are for them as well as for the school children.

In addition to the type of social gatherings mentioned, parties should be given at the school for which the older students, aided by teachers and interested parents, should have chief responsibility. In some cases light refreshments should be served for such occasions; perhaps once or twice a year a genuine community dinner might be held in the school building. The latter occasions will give practical training for members of the home economics classes, both in the high school and the elementary school, and will tend to develop a real community pride in the school and its work. The contracts with school bus drivers should include the provision that they are to drive for certain stated meetings, bringing to evening exercises parents and children who have no other means of conveyance.

Another type of social life is connected with various forms of athletic contests. Football, basketball, and baseball are the most common of these, but they should not occupy the entire attention. Playdays, field meets, and stunt meets are important means for school and community competition and association, and correlate very closely with the physical education and music work of the schools. Teachers' colleges should give definite training for the direction of these athletic-social programs, and enable their students to take charge of such work in the field with the

assurance that comes from a training in *how* to do as well as an ideal of *why* to do.

This responsibility for social activities of the community is one that is less closely related to the formal work of the school than the others that have been discussed, but is one as rich in worthwhile results as any of them, and should not be neglected.

SUMMARY

The rural school is under greater obligation to furnish leadership to the community which it serves than is the city school because the rural community is much less fully organized for social service than is the city.

The rural school cannot undertake to improve all the unsatisfactory conditions of the community. Certain conditions exist in most communities, however, which directly hinder the work for which the schools exist. These conditions the school should undertake to correct.

A most serious condition, which frequently exists, is community indifference to education. A well-planned program to overcome indifference will usually succeed. Good teaching, a smoothly running school organization, playground equipment, supervised play, school programs to which parents and community are invited, all tend to overcome indifference. Following these efforts the program should advance to the organization of Parent-Teachers Association or community clubs. If the teacher has something worth while for the parents to do when organized, the organization will do good; if no program of work is presented it will probably die.

Health improvement is another duty of the school. If a good county health organization exists, teachers should aid in its work. If there is none, the school must plan to put over at least a limited program of health education.

The attitude of the community toward law and order is often

a matter of grave concern to the school. Tactful but frank handling of questions of law violation in class will often do good, as will a discussion before the Parent-Teachers Association or community club.

The rural school should give thrift training in connection with arithmetic, geography, health and civic lessons. This informal instruction should result in insights, appreciations, and attitudes which would bring better economic conditions in the future.

A better social life should be provided by means of entertainments, socials, community dinners, field and athletic contests, play-hours, and community singing.

CHAPTER XX

THE RURAL SCHOOL AND OTHER EDUCATIVE AGENCIES

The school cannot render the most effective service to the community in which it exists, or to society as a whole, if it fails to co-ordinate its efforts in an effective manner with other formal educative agencies which may exist in the community. A formal educative agency may be defined as a socially organized and supported activity, the major purpose of which is that of education. Such an agency may be supported by society as a whole through funds obtained from a regularly levied and collected tax, or by certain members of society who have organized for the purpose of supporting it. The more important of these are the church and its subsidiaries, and various forms of junior clubs, which have developed in a large measure during the present generation.

All of the great religions of the world have been in some measure educative in purpose and function. Christianity has been pre-eminently so, as was natural for a movement that originated with one who was known as the Great Teacher. Sometimes it has been very narrow, sometimes distressingly ineffective, but it has rarely failed to stress its mission of teaching. The home, the school, and the church have usually been linked as the chief formative influences which are concerned in the training of children and youth for effective participation in the duties of adult life. The first part of this chapter will deal largely with the relations between church and school in the performance of

their joint function; the latter part will deal with the relations that should exist between the schools and the various forms of junior production clubs that have been organized for rural youth.

THE RURAL CHURCH

Before entering upon the discussion of the present situation of the rural church a brief view will be taken of the manner in which the situation which exists today has developed.

The Development of the Rural Church Problem.—The early settlers of America came to their new homes with a strong religious tendency. This may not have been very practical as a controlling force for conduct, but it was at least an anchorage to old ways of life. Little time could be spared in pioneer days for religious activities, but the annual revival was an important social event, and a time for an emotional "arousement" that broke the monotony of life. These revivals were sometimes held in a church, but more often at a camp meeting, to which people came from a distance and remained for days, enjoying the social contacts and the emotional outpourings of the preachers. These meetings were sometimes promoted by an organized church of some denomination, at other times they resulted in the organization of a church. The preachers were often uneducated men who placed great stress upon creeds and denominational differences. The American pioneer and his children, being themselves very strong individualists, held tenaciously to the doctrines of their church as they moved West, and with every emotional excitement of a revival there tended to develop denominational differences which served to separate communities rather than unite them. As population became more dense by immigration from various sections of our own country and from nations of the Old World, each believer in a minor denominational difference wished to establish a church of his own kind. This tendency was increased during the early and middle decades of the

last century by the religious debates that were often more heated than the bitter political arguments of the time. Entirely new denominations were formed, often around the personality and beliefs of an argumentative preacher, and old ones were split into subdivisions which had for each other the animosity of quarreling kin. By the end of the last century this brought about a multitude of rural churches with a very small membership and no valid excuse whatever for existence. Frequently shabby church buildings were found near together along a country road, and two or more often faced each other in proud defiance across the streets of a rural village. This created a situation such as was found by Dr. Warren H. Wilson in six Ohio counties. In these six counties were five hundred white, rural churches representing seventy-three denominations including six different kinds of Baptists and five kinds of Methodists. Such multiplicity of weak churches made a ministry of ignorance and deep prejudice inevitable. Men received the "call" to preach with no preparation for teaching their people, and often with a pride in the fact that they were not led astray by "learning." In many cases they were paid almost nothing for their ministration and condemned the "hireling ministry."

Present Day Conditions.—The churches were not wholly out of harmony with the school of the early day—the school of the "little red schoolhouse" and the curriculum of the "three R's"—but during the eighties and nineties a new life began to stir in rural education. Better training was demanded of teachers; the curriculum began to expand; normal schools began to make their appearance in the Middle West as well as in New England, New York, and other states to the east. Consolidation became a possibility, and the rural high school made its entrance upon the scene. During the first decade of this century these changes increased. The Roosevelt Rural Life Commission made its investigation, and the nation awoke to the fact that there was a "Rural

Problem" in the United States. From 1900 to 1930 rural schools made progress in many sections of the country that brought them into a condition approaching equality with city schools. The consolidated elementary and high school brought together upon one campus the children that had been served by a number of one-teacher schools, and into the elementary classrooms of these schools were sent teachers with some amount of college training, academic and professional; the high school teachers were quite uniformly college graduates.

While the changes noted above were taking place in the schools of rural communities, the churches remained much as they had been. A large proportion of them are still providing preaching services only one Sunday out of the month. There is often a weak Sunday school, but rarely are there any of the adjunct activities such as a young people's organization, missionary society, or prayer meeting, that give life and effectiveness to the church. In many cases the preacher is a dispenser of narrow, impractical, doctrinal messages that have no attraction for the young, and little for older persons. This situation has been brought about largely by the over-churching of the rural community. It is not unusual to find an area which is served by a single consolidated school attempting to keep alive five or six churches of as many different denominations. The inevitable result is a poorly paid minister, and no program that challenges the interest, or even the respect, of the more intelligent element of the community. Some attend and give nominal support because of a conviction that a church is a good institution, while others go for the social diversion which even the small attendance provides.

An idea of the type of service the rural church renders may be obtained from data taken from the Annual Report of the Tennessee Conference of the Methodist Church, South. This Conference includes thirty-seven counties of Middle Tennessee, lying largely in excellent agricultural region and being well provided

with improved highways and with rural elementary and high schools of fair quality. The rural territory embraced by the Conference includes 16 "stations," 101 "circuits," and 34 "missions," each served by one minister, or a total number of 151. A "station" consists of a single church served by a full-time minister and found mainly in towns and larger villages. A "circuit" consists of a group of country and village churches ranging in number from three to eight, sharing the services of one minister. The "mission"—the weakest of the three—is a poor circuit. The Home Mission Board of the Conference contributes annually from \$50 to \$200 to each mission toward the payment of the minister's salary. But in spite of this aid, the ministers' salaries exceeded \$600 in only four cases in the year ending September 30, 1933. Data for the same year showed that the 151 ministers served 226 churches with a total membership of 15,446; that of the 151 ministers, 45 received a salary of less than \$600, 78 between \$600 and \$1,000, and 28 received \$1,000 or more. In addition a parsonage was furnished but no traveling expenses were provided.¹

The fact that the churches in a circuit are usually scattered over a wide area, involving a considerable amount of travel, and that the ministers are so poorly paid, makes it evident that rural communities cannot be adequately served in their religious life—devoted and self-sacrificing though the ministers may be.

The data given above represent only a portion of the rural church situation. While the Methodist church is strong in this section, it probably does not represent more than 30 per cent of the rural churches in the area. There are few communities which are not more or less divided in their church affiliations. School consolidation has proceeded rapidly in this section during

¹ *Journal Tennessee Annual Conference, Methodist Episcopal Church, South*. Nashville. Methodist Publishing Company, 1933. Data derived from various tables.

the past ten years, with 267 consolidations in operation during the school year of 1932. There are 132 four-year rural high schools in the area of the Conference, enrolling 15,802 students from farms and rural villages. Many of these provide public transportation, a fact which places public high school facilities within reach of a very large proportion of the youth of these thirty-seven counties. The conclusion to be drawn from the above statements is evident. This area, including more than a third of a state, is developing a modern school organization with consequent improvement of educational facilities, while there is still much the same type of church organization and service that characterized the section when the one-teacher school and the untrained teacher were the vogue.

Rural Church Consolidation.—The rural church must change its methods to meet the needs that have been produced by other agencies. The "old time religion" may be unchanged in essential principles, but it is in sore need of being dressed in modern garments. The first step to be taken is that of consolidation. Rural communities are too poor to enjoy the luxury of separate denominations, when a single church can serve an entire community. Communities that have united to secure a modern school for their children must be brought to do the same thing in regard to their churches. Denominational differences must not be permitted to hold communities apart where the interests of children and the future demand that they unite for a common cause. This step is a difficult one, but it is one that must be taken. Religious prejudices are hard to overcome, but the general enlightenment that is resulting from better schools, elementary and secondary, if it includes a clear presentation of the church situation in rural communities, will eventually bring about the desired results. Ignorance makes the wall that protects prejudices, and education will certainly cause it to crumble and fall. Skepticism is often expressed as to the possibility of bringing about

any large amount of consolidation between rural churches. The task will demand tact, forbearance, and a genuine Christian motive, but a combination of enlightenment and economic pressure will gradually result in the desired changes.

Considerable progress has been made toward rural church combination in various forms. There were definitely known to exist in 1926, 977 rural and village churches that were in some measure combinations of different denominational groups for the service of a community. These were of four types:²

Federated Churches	312
Undenominational Churches	137
Denominational Union Churches	491
Affiliated Churches	37
Total	977

The four terms used above have the following meanings:

Federated churches.—These are institutions formed by the voluntary union of two or more congregations of different denominations. The union is sometimes so complete that all church buildings but one are abandoned and all church activities carried on in the single building. In other cases the church services are held in one building, while the other buildings are retained for Sunday school, social centers, or community houses. In still others each plant is maintained and the federation merely means that the different congregations join together to employ a competent pastor who serves all.

Undenominational church.—Such a church is usually found in a newly settled section where there are a few members of each of a number of denominations who choose to combine into an undenominational organization.

² Hooker, Elizabeth R.—*United Churches*. New York: Institute of Social and Religious Research, Geo. H. Doran Company, 1926, p. 35.

Denominational Union church.—This type of church is regularly affiliated with a denomination but accepts members from other denominations without requiring them to sever their former church relations or to assent to the peculiar beliefs of the denomination with which they take affiliate membership. In some instances these churches are established by denominational agreement to divide territory, and in other cases by a strong church assuming responsibility for the combination of forces.

Affiliated church.—This is an organization that does not have creedal requirements for membership, but is loosely affiliated with some denomination, usually for the purpose of securing its minister or distributing its benevolences.

In some cases these various forms of church unions are inspired by a desire to reduce expenses, in others to increase the efficiency of service. In most cases the result is an increase both in cost and in services rendered over the total cost and service before union. In some cases church union is the result of the leadership of a progressive, community-minded minister. In one case reported by Miss Hooker,³ a Methodist minister said, referring to his organization, that he had "smashed the discipline of his church." He had on his official board two Presbyterians, two Congregationalists, three Baptists, two Christians, and two Episcopalians. In other cases the leadership toward a union community church comes from the laymen. Piper says, "Business men are more community minded than the ministry. In a large minority, perhaps in a majority of cases, they have led in the community church movements. They have begun to think about organized religion, and not depend upon the 'man of the cloth' to do their thinking for them."⁴

It is quite evident that the solution of the rural church problem

³ *Ibid.*

⁴ Piper, David—*The Community Church*. Chicago: Willett, Clark and Colby, 1928, p. 10.

must ultimately be obtained by some form of church consolidation. Christianity is essentially a religion of social unity. It is based upon the conception of the Fatherhood of God and the Brotherhood of Man, as exemplified in the life of Jesus, and as set forth in His teachings. In cities and larger towns separate denominational groups are entirely proper, for there a sufficient number of persons who hold some peculiar belief in regard to Christianity can be brought together to maintain a strong organization at a reasonable per capita cost. In smaller towns, villages, and the open country this condition does not prevail. A rural community whose children can all be cared for by a small consolidated school certainly does not have need for three or four separate religious organizations, all claiming to follow the same spiritual leader. But consolidation of rural churches does not seem to make the progress that school consolidation has been making. Three major factors seem to be responsible for the inability of the rural church to unite its forces in a common cause. These are: (1) deep denominational prejudices which in most cases form the cause for the existence of the competing churches in rural communities; (2) a leadership that tends to emphasize differences rather than likenesses; and (3) a lack of the financial aid to consolidation projects such as has usually been provided for school consolidation. Relative to the third cause it is often true that the central denominational authorities keep alive competing churches by "missionary" aid, and even enter a field already over-churched to subsidize the organization of a new church or denomination. The difficulty lies partly in the mental attitude of rural people in matters religious, and partly in the influence of the church leadership. One leader in the field of rural church improvement says of church consolidation, "I am in favor of it in principle, but there is something wholly inefficient in the religious process, indifferent to the consideration of cost, or dignity, or size, or adminis-

trative or technical perfection, and the trouble with consolidation is that generally it does not work. Where it can be done, it succeeds, and the range of success is fair, but it seems to be an outside pressure put upon an organization by which alone these little churches can be combined. The force that originates Protestant churches, and Catholic also, is the little intimate group, and that small unit knows nothing of consolidation or efficiency."⁵

If the writer quoted above is correct in this analysis of the situation, there must be a fundamental change in the thinking of men before the rural church can overcome the evil effects of denominational division of community forces and resources. If "indifference to cost, or dignity, or size, or administrative or technical perfection" is characteristic of rural people in their attitude toward the church, something is radically wrong. If they must have the church remain a "little intimate group," it is evidence that the communicants are thinking like people of a couple of centuries ago, and not in a manner characteristic of the present. This is not a matter to cause surprise, however, when we think that for centuries there has been a strong tendency for the church to force its membership to accept formal doctrines of past ages, regardless of their relationship to the fundamental teachings of Jesus or of modern social needs.

The cure for the evils from which the rural church suffers, then, would seem to be almost wholly educational, and for that reason an immediate concern of the school. Broader knowledge, better thinking, a spirit of co-operation, a willingness to forget unessential differences—these are the elements that must be brought into the rural community to make it possible for a church with a modern vision and organization to live and function. And these are also the elements that the industrial, economic, social, and political life of the rural community needs.

⁵ Wilson, Warren H.—Personal letter to the writer.

Jesus built His Kingdom, an earthly one of a spiritual nature, on social relationships. Those who were to receive eternal joy in the next world gained this reward because they had done service "to the least of these my brethren." An enlightened mind, a freedom from prejudice, a spirit of co-operation, and a keen sense of social responsibility are basic factors in improvement in the rural church, as they are in many other phases of rural betterment. If there be added to this an improved leadership the difficulties will soon disappear. The great denominational organizations should do as states are doing in the financing of schools—see to it that the rich communities aid the poor. But in order that this may be done, church duplication must be stopped. Aid to a church in any community should depend upon some form of union among the Christian people of that community. This could be accomplished by a planned allocation of denominational territory from the central councils of the church. Or it could come as a voluntary union initiated by the people of the community. If this could be done, it would show a spirit of unselfish leadership inspired by a broad vision. The added funds resulting from combined community resources, supplemented by outside money when needed, would secure a minister of better training, and permit his giving his entire time to a community in religious, moral, social, recreational, and cultural leadership. Good elementary and secondary schools are essential to the bringing about of these conditions. And in attempting to achieve the results suggested, the teaching force of the schools must be definitely, specifically, intelligently, and liberally religious. Every rural teacher should recognize the serious situation that confronts the rural church at the present time, and the great need for its spiritual and social revival. Each should feel individual responsibility for raising up a generation of children who would retain the essential values of the "old time religion," but add to them the methods and the

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pirit of the church of the New Day, which is really Christian because fundamentally social.

JUNIOR CLUB WORK AND THE SCHOOL

The various forms of junior clubs constitute a valuable adjunct to the educational facilities of the rural community. They include the various forms of production clubs such as calf clubs, pig clubs, canning clubs, and others. In some communities here are also organized Boy Scouts, Girl Scouts, and Camp Fire Girls.

Production Clubs.—These clubs are usually organized under the direction of a county farm agent or a home demonstration agent. In some cases a special club agent is employed in a large county. They are not a part of the school system or controlled in any way by school officials, but the organizers usually work through the schools, as this is the most convenient means of making contact with the boys and girls of a community. The tasks and problems involved in the club work are closely related to geography, health, and elementary science, and provide a considerable amount of reading material, and much arithmetic that can well be utilized in the classroom. There is no means by which the rural teacher can promote a genuine interest in the local community and its problems more effectively than through co-operation with the club work that is being carried on in her district. In addition to the advantages mentioned, the club work forms a close bond between school and community, a fact which should be of distinct value to the school.

At the present time there is little organization of the Scouts or Camp Fire Girls in the rural districts, but they tend to spread out from the villages, and in some sections definite efforts are being made to organize them in the larger consolidated schools. They are very valuable organizations from the educa-

tive point of view, with their emphasis upon health, nature, physical training, social and civic duties and responsibilities, and their high ideals of character and service.

Another organization present in many communities, and closely related to production clubs, is that of the Future Farmers of America. This organization is promoted by the vocational agriculture teachers in rural high schools, but it should also be a most valuable aid to the teachers of social science and natural sciences in the high school. It also fits into the English program of debating and public speaking, since the F.F.A. boys are frequently active in debating and declamation.

The progressive teacher who looks upon the school and community as being essentially a unit in educational activities will be on the alert to utilize all of these out-of-school activities to the fullest degree. Where they do not exist she will take an active interest in securing them for her community. So long as the school is thought of as being an institution separate and apart from the other life-interests of the children and adults of the community, it will necessarily fall below its possibilities. As has been said before, the school cannot undertake to do everything that is needed by the community, but there is a wide range of community service which it can render without lessening its essential service. As a rule, the more a school wisely extends its influence over the community as a whole, the better will it perform its specific tasks.

SUMMARY

The school cannot perform its fullest service to a community unless it sustains a proper relation to other organized educational agencies that exist about it. The church and its subsidiaries are the most important of these agencies with which the school is associated. The various forms of junior agricultural clubs are other important agencies.

The rural church has been handicapped in its work by the same factors that have affected the rural school; low per capita wealth to be drawn upon for support, a scattered population, too small units of organization, and conservatism of the people. The duplication of efforts by denominations further reduces financial support and membership. A community that is served by a single consolidated school often has four or five churches within its borders, each too small to be effective for good. There is usually no such agency as the county or state to promote church consolidation. The central authority of the church has more often encouraged the establishment of unnecessary denominational duplication.

Some progress has been made in the elimination of rural church organizations, but denominational prejudices have been a serious hindrance.

Four types of church union are found in the United States. These are: federated churches; undenominational churches; denominational union churches; and affiliated churches. In all, 977 such churches are reported by the American Church Federation.

In addition to a full co-operation of teachers with the church of the community, the school should make a direct contribution to the final solution of the rural church problem by developing a spirit of co-operation, open-mindedness, and an appreciation of the essential values of Christian teaching on the part of those whom they teach.

The school should serve as an organizing center for agricultural clubs, and utilize the interests the club projects awaken in natural and social science teaching. It should also encourage the extension of Boy and Girl Scout, and Camp Fire Girl organizations into rural territory.

CHAPTER XXI

WHAT RURAL SCHOOLS HAVE DONE FOR OTHER LANDS

At this time, when the United States is suffering such serious maladjustments in its economic, industrial, social, and political life, it may not be amiss to look into the matter of what rural schools have done to improve the conditions of other countries when they have faced problems as serious as those which now confront the United States. No country in the Western Hemisphere can supply a profitable example for us to consider. All are in a stage of development closely corresponding to ours, or less advanced. It is only to the older countries of Europe that we can turn for the light of experience, and among these none afford more illuminating examples of rural rebirth through education than do Denmark and Norway.

DENMARK IN THE DEPTHS

The rural population of Denmark, like that of Europe in general, was in a condition of practical serfdom until near the close of the eighteenth century. Landlords were arrogant and tenantry laws harsh and unjust. Not until 1788 were conditions changed. In that year the King freed the serfs of the entire nation. In Copenhagen stands a simple monument commemorating this event. On one side of it is found this inscription:

The King saw that Civic Freedom Fixed in
Righteous Law Gives Love of Country, Courage
for Its Defense, Desire for Knowledge, Longing
for Industry, Hope of Prosperity.

On the other side is found:

The King Bade that Serfdom Should Cease; that
to the Land laws should be given Order and Might,
that the Free Peasant May become Brave and
Enlightened, Industrious and Good, an Honorable
Citizen, in Happiness.

This extension of freedom to the tillers of the soil was destined to bring great good to the land, but only after further suffering. The Napoleonic Wars crushed Denmark. Norway was lost to her; her fleet was gone and with it her power on the sea. Wars further devastated the land a generation later. Her two southern duchies, Slesvig and Holstein, rebelled but were temporarily retained by force. In 1864 a war with Germany further wasted the strength of the country, and brought about the final loss of the two southern duchies. Denmark, after these disasters, was indeed in the depths. But at this time a new leader arose to show the way out of darkness. He was not a king, statesman, soldier, or financial wizard. His official connection was with the church, and his power resulted from a new philosophy of life and education. He was Bishop Grundtvig, the father of the folk high school idea. Through the influence of this institution was brought about the highly efficient system of education, elementary, secondary, vocational and higher, which has been responsible for the remarkable progress of the country.

The success of Denmark in rebuilding its agriculture, and upon this, its national prosperity, resulted from three factors: (1) the spirit of co-operation among the common people; (2)

an abiding faith in their country and its ultimate triumph over its difficulties; and (3) a willingness to master the new science of production from the soil. These three elements in the life of the country folk were fostered in large measure by the folk high schools. Foght says of these institutions:

The folk high schools, which are Denmark's unique contribution to education, have gone farther (than the elementary school) by actually disseminating a peasant culture throughout the agricultural communities which has freed the peasantry from city domination, until they now practically control the country, economically and politically. According to the testimony of prominent Danish leaders, the great agricultural victories of modern times were won through the work of these so-called schools for grown-up people. Their finest work is the development of character, which, these leaders find, forms the basis of the whole future development of the Nation. The mutual trust that the schools teach has made the entire movement of co-operative enterprises in the kingdom possible. Without this trust in one another the farmers' credit societies could not exist; nor could thousands of bacon factories, dairies, and buying and selling associations carry on their splendid work.¹

WHAT IS THE FOLK HIGH SCHOOL?

First of all, we in America must keep in mind that these great agencies for public good are, in a great majority of instances, privately owned. Some are controlled by self-perpetuating corporations. State aid is given to schools and to students, but this does not mean state control. Foght maintains that the success of these institutions has depended from the first upon the personality of the teaching staff. Mrs. Campbell says of Askov, the school which Grundtvig, and his educational associate, Kold, founded in 1844, "I realize that personalities

¹ Foght, Harold W—*Rural Denmark and Its Schools*. New York: The Macmillan Company, 1915, p. 69.

rather than teaching materials were first to impress me.”² Foght³ characterizes the folk schools as groups of able, consecrated leaders rather than huge piles of brick and mortar. He says that most of the schools rather pride themselves upon the simplicity of their buildings and equipment. Folk high schools do not enroll youth under eighteen years of age. They are in some cases co-educational, but usually the sessions for the men and women are at different times. A frequent arrangement is for men to attend from November to April, and for women to replace them from May to August. The schools are quite informal, and do not stress examinations or credits. The day is filled with school activities: singing, gymnastics, and what we would call the “social sciences,” dominating the program. No mathematics except arithmetic is offered and only English and German are offered in the field of foreign language. An idea as to the routine of the day can be obtained from the program for the first year of the co-educational school at Askov. Mrs. Campbell⁴ thinks that the power of the schools lies in the fact that those who come to them have in large measure accepted the philosophy of the national movement, “Cease to measure life in terms of great nations. Make life in Denmark what it can and should be.” She adds, “They come to this (the school) of their own free will, hungry after a number of years of practical work in field, creamery, shop, and home.”⁵ This purposefulness of the fairly matured young person, with a considerable amount of practical experience in life, is no small factor in the success of the schools.

The number of young persons reached by the folk schools and the increased attendance from decade to decade is shown below.

² Campbell, Olive D.—*The Danish Folk School*. New York: The Macmillan Company, 1928, p. 112.

³ Foght, *op. cit.*, p. 215.

⁴ Campbell, *op. cit.*, p. 104.

⁵ *Loc. cit.*

<i>Dates</i>	<i>Attendance</i>
1861-62	396
1871-72	3,098
1881-82	3,575
1891-92	4,815
1901-02	6,282
1911-12	6,510
1920-21	7,006

When one considers that these schools all charge some tuition, and that the young people who attend do so wholly for the good that they will gain after having been out of school for a few years, the showing is quite good.

The unique feature about the work of the Danish Folk Schools is that while they have rebuilt the nation from an economic point of view, they have not been in any sense vocational. They have stressed the history and folk literature of Denmark and the North, going back, as Mrs. Campbell⁶ reports, to 10,000 years B.C. when men followed the receding ice-sheet northward. In addition to this, they have taught young people to sing together and play together. Denmark was made vitally important to its people through song and story, as well as by means of more serious work in geography and history. The students were filled with an enthusiasm for serving their native land, but they were not narrow Nationalists. One teacher is quoted as saying, "Europe is our Fatherland, Denmark is our home."⁷ Above all else the folk schools filled their students with a desire to co-operate for the common good, gave them an enlightened intelligence that made co-operation practicable, and an idealism that assured its success. They attained their ends, as most worth-while ends are attained, by an indirect attack, an attack upon the spiritual elements of life rather than upon the material.

⁶ Campbell, *op. cit.*, p. 117.

⁷ Quoted by Campbell, *op. cit.*, p. 119.

THE DANISH ELEMENTARY SCHOOL

While much has been said of the influence of the folk high school, and with propriety, the debt the nation owes to its elementary schools is very great. The first step toward the establishment of a system of elementary schools was taken as early as 1739. The year 1814, however, marks the beginning of a really effective system. At that time compulsory attendance laws were enacted, covering the ages from seven to fourteen; definite salaries and pensions were provided; and steps were taken to provide reasonable professional training and an assurance of a long-tenure position. Supervision was ineffective until 1848 when the Ministry of Education and Ecclesiastical Affairs became the central authority for school control. Increased responsibility for the support of schools was assumed by the state through laws enacted in 1856, 1899 and 1908. Foght⁸ says that the salaries provided by the last enactment were so liberal as to make the position of rural teacher very attractive and sought after. The schools of Denmark are administered under the general control of the Ministry of Education by nineteen amt boards of education, seventy-three deanery boards, and 1134 country parish commissions. The deanery board is the most important link between the Ministry of Education and the local parish boards, and exercises a large amount of supervisory authority. The amt boards are chiefly concerned with finances and business matters. State aid is provided for a number of purposes, the more important being for teachers' salaries and pensions, for buildings, libraries, and teaching equipment, and for the aid of needy communities.

The legal school year is 246 days. All pupils are not required to attend all of this time. During the winter primary children attend half days and those of the upper grades full days. In

⁸ Foght, *op. cit.*, p. 79.

summer, however, when there is homework for the older children, the conditions are reversed: the primary children attend full days and the upper grade children half days. The required subjects of instruction are religion, reading, writing, arithmetic, geography, singing, drawing, gymnastics (for boys), and hand work. Other subjects are optional with school commissions, including nature study, hygiene and sanitation, sloyd, household economics, and languages other than Danish. Foght says of instruction in the schools: "Danish schools depend more upon the ability of the teacher and less upon textbooks than do American schools. The teachers are professionally prepared and consequently know how to draw upon their broad general reading and experience for much of the classroom materials, instead of depending upon the textbooks. The latter are merely 'leading threads' in the school work."⁹

School buildings are usually well constructed, thoroughly sanitary, and located on land suited in location, area, and character of soil to the purposes of the school. In newer buildings a gymnasium is included, even with the one-teacher schools, and in most cases a teacherage is included under the same roof as the classroom, or adjacent to it. A teacher's garden, of one-third acre for the "First Teacher," and one-fourth of that amount for others, is also provided; the community is supposed to plan it and prepare the soil for planting. In most cases these gardens are used for instructional purposes as well as to supplement the teacher's living.

The training of rural teachers in Denmark is excellent. Foght says of this, "It is safe to place professional preparation of teachers first on the list in looking for the cause of the uniformly good work done in Danish rural schools. No person can receive a permanent call as a teacher who is not a gradu-

⁹ Foght, *op. cit.*, p. 105.

ate from one of the twenty normal schools, or who does not hold some university degree."¹⁰ He also states that of 1467 "First Teachers" 1458 are normal school graduates or hold a university degree. Of the "Second Teachers" only 15 out of 565 do not hold such degrees; and of the teachers in one-teacher schools, only 48 out of 1651 have less than this standard training.¹¹ These teachers are in most cases matured men and women. They receive good compensation in addition to the home, fuel, garden, and retiring pension, all of which go with the position. Foght estimates that the actual purchasing power of the salary received by an average "First Teacher" was, at the time he wrote, equal to a salary of \$1500 to \$1800 in the United States, that the salary of a "Second Teacher" would equal from \$1000 to \$1325, and of a woman assistant from \$750 to \$900.¹² When one considers the salary schedule, the prevailing long tenure and permanent employment, and the other forms of compensation of Danish teachers it becomes quite obvious why rural education in Denmark is securing vastly better results than rural education in America.

DANISH RURAL VOCATIONAL SCHOOLS

The Danish youth completes the elementary school at the age of fourteen or fifteen. He then works on the farm or in garden, dairy or orchard for three or four years before being eligible to enter the folk high school at eighteen. If he does not choose to enter this institution he may go directly to an agricultural school to receive specific training in scientific and practical agriculture, horticulture, or in training for employment as a rural artisan. A number, varying from thirty-five to fifty per cent, take one or two winters in the folk high school before entering

¹⁰ *Ibid.*, p. 131.

¹¹ *Ibid.*, p. 132.

¹² *Ibid.*, p. 145.

the school of agriculture. Young women are given courses in household economics in the agricultural schools. The regular course is six months in length, and the program of studies and practical activities is quite intense. Many students come from the small-holds and must look forward to making a living for themselves and family from tracts varying in size from three to seven acres.

There are twenty-two agricultural schools in Denmark, and like the folk high schools they are privately owned, but receive public support. Mrs. Campbell says, in speaking of the relation between the folk high schools and the agricultural and home economics schools:

As the folk school seeks to make better men, so the agricultural school seeks to make better all-around farmers. It does not disregard the importance of making better men, as well as better farmers. . . . As in the folk school, morning song, gymnastics, singing, and instruction in Danish are a part of the program. Sociology, too, is considered an essential for the modern farmer.¹³

Instruction in all schools is largely by the lecture method. A conception as to the breadth of training provided may be obtained from the list of subjects taught, and the hours devoted to each.

SUBJECTS TAUGHT IN AGRICULTURAL SCHOOLS AND AVERAGE NUMBER OF HOURS FOR EACH SUBJECT ¹⁴

<i>Subject</i>	<i>Hours</i>
Bookkeeping	64
Inorganic chemistry	60
Farm crops	56
Manure	55
Physics	59

¹³ Campbell, *op. cit.*, p. 187.

¹⁴ *Loc. cit.*

RURAL SCHOOLS IN OTHER LANDS

<i>Subject</i>	<i>Hours</i>
Arithmetic	48
Cattle	38
Anatomy	36
Feeding livestock	34
Botany	34
Judging livestock	33
Implements	31
Drawing	30
Danish	28
Study of soils	28
Farm economy	28
History of agriculture	24
Horses	24
Organic chemistry	20
Drawing, lining, etc.	20
Tillage	19
Sociology	17
Dairying	16
Surveying and leveling	14
Pigs	14
Weeds and their eradication	12
Meadow and moor culture	10
Seeds and seed testing	8
Rotation of crops	4
Total hours of lectures	865
Average hours lectures per day	6

FOLK SCHOOLS AND RURAL EDUCATION IN OTHER
SCANDINAVIAN COUNTRIES

The folk high school idea spread to Norway, Sweden, and Finland within a decade or two after Grundtvig started the movement in Denmark. They are privately owned but receive public aid, and are strongly cultural, with emphasis upon na-

tional history, folk-stories, songs, and traditions. They are more frequently co-educational than in the parent country, and because of the greater variety in topography and industries they have a more varied program.

Elementary Rural Schools.—Excellent elementary schools have been maintained in all of these northern countries for more than half a century. Attendance laws have been strict, attendance good, and as a result illiteracy is practically non-existent except in the case of defectives. A fair understanding of the rural elementary schools of Norway may be given by quoting from Jensen. In his chapter on Conclusions he says:

The position of the rural elementary school in the Norwegian system of education is rather unique, at least from the American point of view. Instead of regarding it as merely a part of the elementary school system without any differentiation between the urban and rural sections, the people of Norway have definitely recognized the special problems of the rural as well as the urban sections, in educational activities in accordance with these recognized differences. As a consequence of this the rural elementary schools of Norway have developed normally and without so much of that rather useless, and often hopeless, striving to keep up with the urban schools, so frequently found in America. . . .

Since the rural school cares for the majority of the school children of Norway, it receives a great deal of attention from national school authorities, as well as from the national parliament and county boards. The urban schools have been able to take better care of their own problems, chiefly because of the greater accumulation of wealth in cities, but the rural schools have finally made their needs so obvious to the national leaders in political, economic, and educational affairs as to receive eventually the attention and aid necessary to construct and maintain the present rural schools with comparatively high standards and efficient methods of administration and instruction. . . .

The remarkable esteem with which the general public regards the

teaching profession is an evidence of the success of men and women who are devoting their lives to this form of public service. The teacher is comparatively well paid, housed, and ordinarily has the respect of the entire community. The tenure of office is a safeguard against frequent changes in position, and the possession of a house and land tends to make the teacher a natural and interested member of the community. He will probably settle down for life in his position, giving the utmost of his strength to his chosen field of work. In spite of limited means and difficult geographical situations, Norway has treated her rural teachers with greater generosity than almost any other country. The teachers are really members of a profession that is respected and admired by all classes of people.¹⁵

Salaries in Norway, as stated by Mr. Jensen, are sufficient to attract and hold good teachers. A very large proportion of all salaries is paid from the national treasury, and the cost of a well-trained and experienced teacher will amount to no more locally than a poorly trained and inexperienced one. Since the teachers are employed by the local board, quite naturally the board will employ the best available teacher, as there is no difference in cost to them, and since the teacher is a permanent resident of the community, the community benefits directly as well as indirectly from the employment of an excellent teacher. The actual salaries of rural elementary teachers provided by a law of 1921 range from a minimum of 2177 kroner for inexperienced teachers to a minimum of 4325 kroner, for teachers with as much as twelve years of experience. This amounts roughly to \$530 as minimum for inexperienced teachers, and \$1080 for the minimum after twelve years of experience. When to these salaries is added the home and garden, and the retiring pension after the age of seventy, or after thirty years of service, the rural teacher's compensation is very attractive. An added

¹⁵ Jensen, A. S.—*The Rural Schools of Norway*. Boston: Stratford Company, 1928, p. 233.

consideration is that in terms of buying power a dollar is considerably more in any of the Scandinavian countries than it is in the United States.

When the various governmental units in the United States provide as amply for the support of rural teachers, require as thorough a training, make employment as certain and continuous, and provide a retiring pension as adequate as do Denmark and Norway, we may expect to gain as valuable results from education as they do. Until this is done, we may expect to have conditions that are unsatisfactory from every point of view. Society cannot expect to *get from* an educational system except in proportion as it *puts into* that system. It must be satisfied if its schools "measure unto it again" just in the degree that they have been "measured unto." This is a law that has always worked, and will continue to work, as a matter of averages.

SUMMARY

One of the best examples of what schools can do for a rural people is to be found in Denmark.

The Napoleonic Wars, rebellion of rich provinces, and a war with Germany brought the nation to its lowest depths of poverty and misery by 1865. Kings and armies were not to rescue the people. That task was left for the great preacher-philosopher, Bishop Grundtvig, and such teachers as Kold and others, who enlisted under his leadership.

Grundtvig's greatest contribution to Denmark was the folk high school. These institutions, privately owned and controlled, made three great contributions to the Danish people. They developed a spirit of co-operation, created an abiding faith in Denmark and its ultimate triumph over difficulties, and gave an eagerness to master the new science of agriculture. They enrolled no one under eighteen. They stressed singing, play, and

the literature and history of the Danish people. They gave no instruction in agriculture or trades.

The elementary schools of Denmark began to be really effective in 1814. At that time compulsory attendance laws were enacted and professional training of teachers was required. Supervision was provided as early as 1848, and by 1908 rural elementary school salaries and living accommodations for teachers had so improved as to make such positions most attractive. The rapid improvement in rural elementary schools during the past forty years has been due in no small measure to the influence of the folk high school.

Special agricultural schools are provided for youth who do not go to the folk high schools or to institutions of higher learning. Those who complete the elementary schools are not permitted to enter these schools until they are eighteen. For three or four years, therefore, boys have been engaged in some form of agricultural employment and girls in the home or dairy. The courses given are very practical and most of those enrolling go to "small-holds" of from five to seven acres to make a living for a family.

The general type of school service provided by Denmark has been adopted, with minor modifications, by Norway, Sweden, and Finland. Norway has from the first recognized the need for a special type of school for rural sections and has developed such schools with as much care and thought as it has expended upon the schools which serve urban centers.

CHAPTER XXII

A LOOK TO THE FUTURE

Any attempt to forecast the future at the present time must necessarily be a matter of uncertain outcome. There are forces active in society that may modify the social, industrial, economic, and political organization profoundly. If these forces are not permitted to work out, in an orderly manner, a new type of social organization better adapted to the needs of society than that which now exists, there may result disruptive changes of revolutionary proportions. The two basic factors with which this volume deals, namely, agriculture and education, will necessarily be vitally concerned with whatever emerges from the rather chaotic condition of the present. Each is also an important force in determining the direction in which change will be made. Agriculture, still the most important industry in which men are engaged, must be equitably organized into a new industrial and economic life of the nation. Education must give to citizens knowledge, right attitudes, and ideals for the purpose of preparing them to use more wisely the power given them to control the production and distribution of wealth, and a willingness to assume the proper degree of responsibility for a form of social control that will result in the greatest amount of happiness and self-realization for each member of society.

Scientific discoveries and mechanical inventions have brought new factors into operation which may modify farming as a manner of life as profoundly as they have modified it in pro-

ductive methods and in its relation to commercial activities. So long as man-power and horse-power, operating through primitive tools, were the only means of performing the activities that were carried on in crop production and distribution, the life of the farmer had to be lived very close to the soil. He was, in many ways, "Brother to the insensible clod." But now that the burden of toil has, in a measure, been removed from his shoulders, the farmer has lifted his head enough to see the world about him more clearly in its proper relationships. He has gained a freedom that would have been impossible without the introduction of science, machinery, and mechanical power into the processes involved in this age-old task of extracting the necessities and luxuries of life from the soil. With this freedom has come a consciousness of his right to live a life as satisfying, as honored among his fellows, as rich in what has come to be known as the cultural elements of living, as that of any other man.

The realization of this inalienable right to the best that life has to offer has driven the farmer of America through untracked forests and across great rivers into the new fields of the prairie lands already cleared for his plow. It led him across deserts and over mountains in the conquest of a continent. It also induced him to change his occupation and to abandon the "wide places of the Earth" for the town and city. It emboldened him to demand improved roads, to mortgage his future for automobiles, for telephones, and for a hundred productive and non-productive inventions in order that he and his family might not be shut away from the advantages of modern life. If he chose to remain upon the land which he tilled rather than move to town or village, he helped in the creation of a new educational unit, the consolidated school, which gave to his children, while continuing to enjoy the farmstead home, an opportunity for education as good as the one the city could provide. The power

of his vote brought a daily mail to his door; he secured federal legislation, which today seems almost socialistic, in an effort to provide for himself a fair profit from the commodities which he produces for sale. When driven to extremity he adopted the methods of his brothers in industry and struck for better prices.

Had the farmer of America been content to accept a lower standard of living and of life than that enjoyed by other great population groups having no more ability, no greater energy, thrift, and ambition than he, the "farm problem" of the present might not have developed. But he could not be content with this impoverished life. He felt himself an equal of the city artisan, merchant, or professional man, and demanded a chance for his children no less favorable than that which theirs enjoyed. The result has been a struggle, during the past half century, for larger production, for an increased income, and for a fairer share of profit upon his labor and investment. The increased production came, but the income dwindled. He attempted to secure the fair profit by means of organization, agitation, and legislation, but little was accomplished. Today he is confused or discouraged, rebellious, or seriously thoughtful, according to his background of knowledge, and his ability to utilize that knowledge in clear, constructive thinking. His schools, elementary, secondary, and collegiate, have done much for him but not enough. The farm press has thrown light upon his problems, but many of them still remain in deep shadow. The school must do more. It must give to the farm children of today a better training for constructive thinking in the years just ahead. Agriculture cannot remain as it has been. In the general reorganization of the economic, industrial, and political life of the world, the farm must be counted as a major interest, demanding the best thought, not only of the farmers, but of all thinking people who are working toward a new system of human

relationships as expressed in every phase of social organization and co-ordination.

In spite of the great uncertainty as to many problems of the future, there are certain general problems which bulk large in the agricultural situation. Those that take rather definite shape are: (1) How can farm production be permanently controlled so as not to deprive the farmer of a profitable market through over-production, or do an injustice to the buying public by a scarcity that results in exorbitant prices? (2) Is the home-farmer to pass off the stage and his place be taken by great commercial farms, as small home-industries have been driven out by large industrial organizations? (3) Will the farmer of the future continue to live upon the land he cultivates, or will he join his fellows in establishing a farm-village from which he will go out to work? These three problems will be further divided in the discussion that follows, but it would seem that they contain the essential problems that will demand right solution in the years to come.

PRODUCTION CONTROL AND FARM PROFITS

As America has been witnessing during the past few years an attempt to control farm production and maintain profit prices on a scale unknown in the past to any like extent, it is appropriate that this problem be given first consideration.

There is no doubt but that the decrease of the American farmer's buying power, due to over-production or under-consumption, or a combination of the two, has been a very important contributing element in the economic situation that has developed in our country since 1929. Since the farmers themselves did not seem to have the power to solve the problems which they and the nation faced as quickly as they needed to be solved for the general economic welfare, it was doubtless wise that society should step into the situation, through the medium of

the federal government, and attempt to find a solution. The government took an important remedial step in 1933 when it paid the cotton growers of the South roughly \$112,600,000 out of the federal treasury, for plowing up approximately one-fourth of the growing crop during the summer of that year. These cotton farmers also received \$50,000,000 on the sale of government-owned cotton on which they had been given options.¹

For the crop year of 1934 cotton production was controlled by the provisions of the Bankhead Act. This act provides for a free ginning of 10,000,000 bales of cotton per year and a tax of 50 per cent on all above that amount. The amount of tax-exempt cotton is allotted to individual farms on the basis of the production history of the farm. The tax in no case is to be less than five cents per pound. For the year 1934 the total payments to farmers of eighteen cotton states amounted to \$202,546,560.79. Payments ranged from \$3731.58 for Kansas, to \$70,311,496.05 for Texas. In addition to the payments on cotton, the federal government paid in other forms of production control the following amounts: wheat, \$146,749,953.87; tobacco, \$18,995,664.48; corn and hogs, \$159,154,075.48; sugar, \$55,541.30. The total of the payments for the year 1934 was \$1,055,003,591.86.² This money was secured by means of a processing tax of 30 cents per bushel on wheat, 45 cents per pound on cotton and \$2.25 per hundred on hogs, which was paid ultimately by the consumer.

This method of increasing the profits of the farmer is doubtless justifiable as an emergency expedient, but, in the opinion of the writer, must be only temporary. Ultimately, the farmers

¹ Report of the U. S. Commissioner of Agriculture. Washington: Government Printing Office, December, 1934, pp. 38-40

² Summary Statement of Rental and Benefit Payments for 1934. Issued by the Agricultural Adjustment Administration through the office of the Comptroller. Washington: Government Printing Office.

of America must form co-operative producing organizations which will control production and prices without governmental aid. Other evils connected with the sale and distribution of farm commodities demand careful thought, co-operative effort and probably federal legislation. There appears to be entirely too much difference between the prices received by the producer and that paid by the ultimate consumer, due to speculation, monopolistic control of farm products and inefficient methods of distribution. The mitigation of these evils can only be achieved by a combination of legislation, co-operative control of production and sales, intelligently organized farmers, and a full recognition of their mutual interest in the problem on the part of producers and final purchasers.

Closely related to the problem of controlling agricultural production is the problem of measuring the consuming power of the American public. If the masses of our population are given an income that will make possible a buying power sufficient to meet their optimum needs, the problem of production control will probably disappear. The consumption of various farm products in the past has never fairly indicated what it should be. For this reason there will have to be a constant adjustment of production to demands as the average family consumption increases to the point where all members of society are being fed, clothed, and sheltered in the most satisfying manner. Ample production for an American population fully provided for in all of these ways is an experience of which we have no knowledge, and until we have, all efforts to limit production to optimum consumption are but temporary expedients.

THE FUTURE OF THE FARM-HOME

In the past, when each farm-home was very largely independent of the manufacturer, merchant or transportation facilities, and when the school was of minor importance in the com-

munity, the problem of the location of the farm-home did not exist. But the past half century has brought about profound changes. The farm-home must have many types of service which radiate out from the village, town, or city. It must have schools for its children better than those that can be taught by a single teacher in a single room. It is seriously in need of a better church, better recreational facilities, and more adequate cultural influences than could be provided in the isolated condition such as existed in the past. To overcome these deficiencies the consolidated school has come into being, and the larger community church is following the larger unit of school, slowly but surely. Social, recreational, and cultural facilities are accompanying the better schools and churches. Roads have been improved to permit these changes; telephones have been installed; free delivery of mail has spread to almost every community; and electric transmission lines are reaching more and more rural homes each year. As this process goes on many are asking: Why not concentrate the homes in the village close to school, church, stores, bank, post office, recreational center, and electric line, and transport the laborer's to the farm, instead of keeping the home on the farm and transporting children and adults to the village for school, church, trade, business, and social life?

There are reasons for and against this proposition. In the first place the work that is done on the home-farm does not run according to scheduled hours of labor. Livestock and poultry may need attention at almost any time, night or day, and if the farmer leaves his farm after eight or ten hours of labor and supervision, there will be fourteen to sixteen hours during which many little things that might need to be done will be left undone. Another point is the desirability of having garden, orchard, and poultry yard near the kitchen. If the home is from five to ten miles from the farm much incon-

venience will result in getting these very valuable commodities for the family table. A third objection might be based upon the loss that would come from removing the children from the out-of-door environment of the farm and the natural situation where labor and responsibility are provided, as discussed in Chapter IV.

The answers to these objections by those who favor the farm-village as opposed to the farm-home plan as we have it generally at present, are something as follows: First, the farm-village need not be concentrated to the degree that would prevent the kitchen garden, orchard, and poultry yard on the lot with it. A lot 100 ft. by 400 ft. contains a little less than one acre. The dwelling and such out-buildings as would be needed could be placed on 150 ft. of the front of such a lot. This would give ample space for a lawn, front and back, and leave a plot 100 by 250 ft. for garden, fruit, and poultry. This area would be ample for raising the vegetables for daily use, the small fruits for the family, a few fruit trees to provide for current consumption, and a small home-demand poultry yard. Vegetables and fruits for canning and sale would be raised on the farm, of course, as would poultry beyond that needed for daily consumption. Large families might increase this village lot to 200 by 400 ft., or almost two acres, and thus provide opportunity for much more production near the home and more work on it for smaller children. It may be added that such a home-lot would provide much of the nature environment upon which so much value has been placed. The older children would, quite naturally, spend much time on the farm during the months when school is not in session.

The development of village life for the farmers of America, if ultimately the best solution of the social, educational, and religious problems of the rural community, would come slowly. The farm is very definitely "use property," and as such is bound

very closely to the emotional life of the farmer and his family. The farmer is not merely the owner of his farm. He has put into it far more than money. It represents the best that he and his family could give of labor, of skill in management, of judgment, of hopes and fears, of life itself, and it would take more than a social theory to remove him from it.

If the farm-village should ever come into existence as a substitute for the farm-home of today, it would need to come as the result of careful planning. Such a farm-village might be developed to provide homes for 200 farm families, and the distinctively village population that should accompany it. If the average farm served by the village were 200 acres, this would mean that it would serve an area approximately eight miles square. That would mean that the most remote farms would be from five to six miles from the village, if it were located in the center of its area. This village, with an approximate population of 1250, would provide about 275 children of school age, a number sufficient to justify a good elementary and high school. It could support one or two churches, as well as stores, service agencies, and a professional personnel that would be fairly satisfactory. It would justify an electric connection with a power center or the erection of its own plant. It would make possible a sanitary water supply and a sewage disposal system. It would provide opportunity for musical organizations, various social and service clubs, a small public library, worthwhile recreational and entertainment facilities. In short, it would bring to farm folk a type of life that would be satisfying to those interested in the best things that modern society has to offer. With good roads radiating from it, every farmer would be within ten or fifteen minutes of his farm, a shorter distance in point of time than the farmers of a generation ago were from the "back field" when they left the barn with a team. It would break up the excessive isolation of the farm-home, yet

retain the more essential of its advantages. It would place farm people midway between fields and forests on the one hand, and the city on the other, making it possible for them to obtain many of the advantages of each. There are many attractive features about such a scheme as this, and those interested in promoting all that is best in rural life should not turn away from the idea until they have given it most careful consideration.

HOME FARMING VS. COMMERCIAL FARMING

The third problem stated above involves the question: Can the small farmer of the home-farm type continue to compete with the highly organized, efficiently managed commercial farm any more than the old-time wagon-maker or cobbler could compete with the mechanized, power-driven, centralized industries?

There seems but little doubt that a negative answer must be given to this question unless a very thorough reorganization of many farm practices can be made and much low-fertility land can be eliminated from the hopeless competition with better land. There are certain areas that will inevitably produce the corn, wheat, cotton, tobacco, hogs, and beef cattle for the general markets of the world. The large, level fertile tracts of land, where a tractor can run for a mile at a time without turning, can produce grains and cotton fiber at a unit cost impossible for the small farmer to duplicate. Such areas probably should come under corporate management, and those who work upon them dwell in villages such as the one described above and receive wages for fixed hours of labor.

It is possible, too, that poultry and dairy products will come under the same system; and if these, why not also vegetables, fruits, and everything now produced by the small farmer? Transportation has become so economical and efficient that there is almost no limit to the development of commercial production. It is said that the lettuce-growers of the Connecticut Val-

ley are in danger of being put out of business by car-shipments of lettuce from the Pacific Coast. If that is true now, what will be the results when hydro-electric power is developed to its full possibilities, and refrigeration is still further perfected both electrically and by means of dry ice? The author believes that there are most important spiritual values derived from the home-farm unit, but if economic laws are against such a producing unit, it will inevitably have to yield sooner or later. If this is true, those interested in the less tangible values of the farm-home must undertake to preserve them in any modified form of rural life which may be developed.

If the "factory system" of agricultural production prevails in the end, so far as major items of production are concerned, there may yet result two types of village life that will retain these essential human values. These are the farm-village as it has been discussed, and the de-centralized industrial village. The latter type of village would be centered about a factory of some kind, large enough to provide employment for the heads of, perhaps, 200 families. In these, labor would be carried on for the short hours demanded by machine production; during the time when not employed in this manner, the men would be occupied in caring for small tracts of land, probably from two to five acres each. From these tracts they would be able to produce a large part of a good living, though nothing would be produced for sale, even locally. The families of these factory-farm laborers would be living in an essentially rural environment, where parents and children would work together on the "farmlet" getting the advantages of farm life and production; at the same time they would be rendering society a service in manufacture that would give them the major part of a high-standard living. Such an industrial village would naturally be located in a relatively poor section where most of the land was marginal or sub-marginal, where forests either existed

or would be established, and where hydro-electric power was available for industrial uses. Experiments along this line are already started by the Tennessee Valley Authority.

In a statement released March 1, 1934, this Authority said of the town of Norris, which is being developed near the site of the Norris Dam, "The first community town forest in the Tennessee Valley has been established at the town of Norris. This forest includes approximately 2000 acres, and will be managed on a scientifically sustained yield basis for the production of forest products." In the same circular mention is made of the Cumberland Homesteads Project on the plateau near Crossville, Tennessee, which is being established by the Subsistence Homes Division of the Department of the Interior. A survey of the 12,000 acres included in this Homesteads Project showed that 5000 acres of this land were fitted for forest only. This land has been converted into a community forest and managed in the interest of the co-operative, as a whole, on a sustained basis.

Millions of acres of land are lying within the Appalachian area, and on the plateaus to the west of it, that are not productive enough to sustain satisfactorily an agricultural population. If vast areas of this land should be converted into productive forests, and much of what remains used in small plots to produce a part living for industrial workers residing in villages of from 1500 to 2500 population, the social problems of this section would be solved, and an immense producing power created where now an impossible agriculture is degenerating those who attempt to practice it.

It would seem then that the future holds great possibilities for two types of rural development. First, the complete mechanization of agriculture on the best farming lands of the nation, either under individual or corporate control, with the farm-homes shifted into well-planned, sanitary, beautiful farm-vil-

lages having every advantage that a fair degree of prosperity and contiguity permit. Second, the development, in regions unsuited to general farming, of the industrial rural village accessible to power and raw materials, and surrounded by land fitted for garden, fruit, poultry, and home-farming where leisure time for adults and children may be spent with pleasure and profit, while the chief source of family livelihood is found in the short hours of factory labor.

As was said at the opening of this chapter, no one can forecast the future at this time of appallingly rapid change. A few things, however, seem certain. This is no time when humanity can afford to "muddle through" the situation which is faced. There must be clear, fearless, unselfish, constructive thinking done on the part of the upper ten to twenty-five per cent of the intelligence of the nation. The danger to our democratic institutions does not lie in the "unthinking masses," but in the indifference of the "thinking classes" to their social responsibility. There is a sufficient supply of high intelligence in our country to solve our problems, and solve them right, if those who possess this power would use it vigorously, guided by a broad and thorough understanding of the situation that exists and with a positive conviction that whatever is for the good of the many is likewise good for the few,—that the interest of each is inextricably tied up with the interests of all.

One thing stands out above all others. Education holds the key to the future. Not the formal education of the past. Not the "dollar education" of the decades just gone. Not an education limited to the few—but an education of sound personal character and broad social sympathy. An education which will form an indissoluble union between the aims, aspirations and ideals of the individual and society. It cannot be a cheap education, for cheapness is not compatible with greatness, and a saving education today must be great. It cannot be a narrow

education, for in order to bring about an effective social integration the dominating ideals of men must be as broad as human life itself. It cannot be a material education, for though religion may have failed to exalt the spiritual above the material, science has come to the rescue and proven matter itself to be unmaterial.

Rural and urban citizens must cease to have dividing lines of jealousy and misunderstanding separating them. Each must do its utmost for the other. Each has its problems, each its advantages, each its disadvantages, but so far as the essential welfare of each is concerned there can be no antagonism, no division. This book has dealt with rural education because in this field there are great and specific needs, but the great, underlying purpose back of it has been a strong and abiding conviction on the part of the author that

"No life can be pure in its purpose and strong in its strife,
And all life not be made purer and better thereby."

APPENDIX

During the years of 1928 and 1929 a study was carried on by the author with the purpose of throwing additional light upon the situation as to present conditions and trends of rural intelligence. Two assumptions were made as being of first importance in order to secure conclusions that would be sound and of sufficient significance to warrant their consideration in the solution of the rural problem of America. The first was that *any investigation carried on with the view to determining the trend in rural intelligence as affected by migration to urban centers, must be carried on in a region where soil, climate, and marketing facilities are such as make possible a successful agriculture and a satisfactory rural life.*

The second assumption was that *any study in the rural field, based upon the results of intelligence tests, must, so far as possible, eliminate all inequalities that arise from the differences in rural and urban experiences and educational advantages.* In order to meet the demands of this assumption as nearly as possible, the investigation was limited, in large measure, to comparisons within the rural groups studied and an effort was made to secure data from communities as similar as possible, and from groups within these communities that had had approximately the same educational advantages.

THE REGIONS SELECTED FOR STUDY

The data used in this investigation were gathered from three regions. These were, the Powell's Valley country of Eastern Tennessee and Western Virginia; a group of six counties in

Middle Tennessee; and Shelby County, in the Blue Grass region of Kentucky.

The following summary presents the facts of chief importance in regard to the areas in which this study was carried on.

1. The counties and communities studied are classed as good to superior agricultural regions, having a median value per acre of \$52.25 and ranging from a valuation of \$50 in Powell's Valley to \$85.50 in Davidson County, Tennessee, where values are materially affected by the proximity of Nashville to farm communities studied. Omitting Davidson County, the range was from \$50 in Powell's Valley to \$56.60 in Williamson County, Tennessee.

2. There are good trunk and local roads in all sections studied, and railway facilities are such as to insure access to markets, and easy communication with surrounding territory.

3. The size of farms owned or rented by parents is such as to give a fair economic basis for reasonable prosperity, the range of averages being from 86 acres in Shelby County, Kentucky, to 159 in Williamson County, Tennessee, with a median of 131 acres for farms owned and 139 acres for farms rented by parents.

4. The communities studied, with but few exceptions, had been provided with eight months of elementary school during the school life of the students tested, and in most cases the buildings, equipment, and teachers were such as to indicate that fair educational advantages were being provided.

5. Of the homes from which students came, 79.1 per cent were on farms and the remainder were in country villages or small towns. The parents owned 79.7 per cent of the farm homes.

THE GROUPS SELECTED FOR STUDY

Because of ease of testing and the meaningfulness of the results obtained, students in good rural high schools in fairly prosperous farming communities were selected for study. It seemed likely

that this group would show the effect of school selection, and give an average intelligence level higher than the average for the communities studied, but it was believed that this would be a lesser evil than the more unreliable judgments of the less mature children of the elementary grades upon the matters presented in the questionnaire. Furthermore, since the maintenance of a satisfactory type of rural citizenship and of a high level of economic efficiency on the farms depends largely upon retaining for future leadership an adequate number from the higher intelligence levels, it was thought that the results obtained from a study of the high school group would be more significant than would those derived from the more representative, because less highly selected, elementary school group.

METHOD EMPLOYED IN THE STUDY

A questionnaire was filled out by each student who completed the intelligence test. This questionnaire called for information as to occupation of parents—owners or tenants of farm cultivated; schooling and present occupation of older brothers and sisters; rural or urban residence of uncles and aunts; the attitude of the individual as to farming as a vocation, in the case of boys, and place of future residence, in the case of girls; other vocational choices, if farming was not preferred; and a few other points not important in this summary. The questionnaires were filled out under the direction of the author, care and frankness urged, with assurance that no other person would see or know individual answers. The results obtained were as follows:

1. Residence and Ownership of Land:

Living on farms	1,072
Living in villages	269
Parents own farms	729
Parents rent farms	186
Median size of owned farms	131 acres

Median size of rented farms	139 acres
Median value of owned farms	\$6,844.75

2. Present Residence and Schooling of Older Brothers and Sisters:

Number on farms	498 or 35.96%
Number non-farm rural	275 or 19.85%
Number urban	612 or 44.19%
Average Schooling above Elementary School:	
Farm group	1 year, 6 months
Non-farm group (village and urban)	3 years
Excess of non-farm	1 year, 3 months

3. Residence of Uncles and Aunts:

Rural farm	2,113 or 47.67%
Rural non-farm	543 or 12.25%
Urban	1,776 or 40.08%

4. Intelligence Test Results:

a. *Intelligence Scores of Students Tested:*

The results obtained by applying the Otis Self-Administering Test to the 1,341 high school students included in the study are as follows:

Median I.Q.	93.32
---------------------	-------

Distribution of scores:

Very superior, I.Q. 120 or above	1.12%
Superior, I.Q. 110 to 119	5.93%
Normal, I.Q. 90 to 109	52.10%
Dull, I.Q. 80 to 89	28.83%
Border zone, I.Q. 70 to 79	11.11%
Feeble-minded, I.Q. below 70 . . . . .	.90%

b. *Comparative Intelligence Scores of Farm and Village Students.*

GROUP	MEDIAN I.Q.	SUPERIOR	VERY LOW
Farm Students	91.79	6.28%	13.25%
Village Students	95.19	10.15%	7.18%

c. *Intelligence Scores of Various Occupation Choice Groups:*

VOCATIONAL CHOICES	NUMBER	MEDIAN I.Q.	PER CENT	PER CENT
			ABOVE 109 I.Q.	BELOW 80 I.Q.
Professional	100	98.94	19.00	4.09
Teaching	181	95.66	8.83	6.63
Stenography	88	92.62	4.54	2.27
Mechanics and Trade	47	91.66	2.13	8.51
Bookkeeping and Office	71	91.00	5.67	9.86
Nursing	48	90.63	6.25	6.25
Business	38	90.50	2.63	18.85
Farming	186	90.00	7.47	13.33
Miscellaneous	31	91.00	9.68	16.13
No choice of vocation	551	92.63	6.00	11.81

d. *Probable Intelligence of Older Brothers and Sisters and of Uncles and Aunts as Indicated by the Intelligence Score of Relative Tested.*

An "indicated I.Q." for each group was obtained by multiplying the I.Q. of the student tested by the number of relatives living on farms, in rural villages, and in cities and dividing the sum of these products by the number of individuals in each group. The results were as indicated below.

BROTHER-SISTER RESULTS		INDICATED I.Q.
Farm residents		92.43
Village residents		96.29
City residents		96.68
UNCLE-AUNT RESULTS		
Farm residents		96.08
Village residents		98.88
City residents		98.00

The above data indicate that there has been a positive tendency for migration from the farm to villages and cities to take the higher levels of intelligence from the farm to the village or city in each of these generations.

CONCLUSIONS

The following conclusions as to rural intelligence and intelligence trends seem to be warranted by the facts presented above:

1. It seems that the rural communities dealt with in this study tend to perpetuate themselves from their lower intelligence levels and thereby give a downward trend to the average native ability of the succeeding generation. This tendency is not large but was found in the evidence gathered no matter from what direction the problem was approached.

2. The smallness of the tendency toward selective migration from the rural community, with a consequent gradual lowering of the average level of intelligence, gives encouragement to the belief that it may be possible not only to check, but actually to reverse this tendency by adequate changes in the economic, social, and cultural conditions which now exist in rural communities.

3. Additional encouragement comes from the fact that while the attitude of high school students in the communities studied indicates a tendency for the brighter individuals to turn from farming as a vocation, the group expressing a choice for farming includes a higher percentage of the superior and very superior individuals than does the group who wish to leave the farm.

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